NEXT-GENERATION LAUNCH SPECIAL

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THIS IS NEXT-GEN GAMING
DO XBOX ONE AND PS4 DELIVER ON THEIR PROMISES?

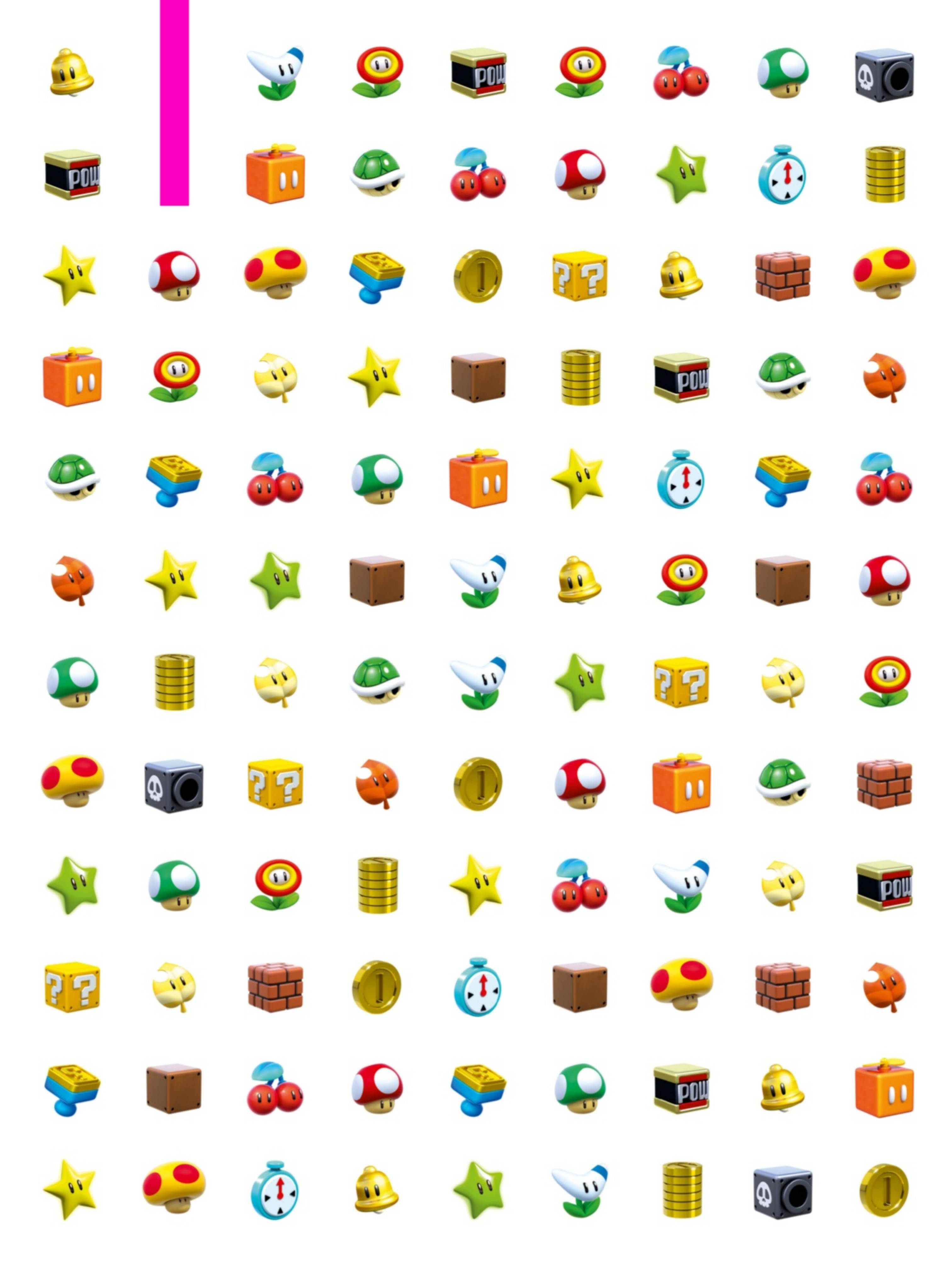
IT'S TIME

SUPER MARIO 3D WORLD:
THE REASON TO OWN A WII U HAS ARRIVED

INSIDE THE MIND BEHIND ICO
A RARE AUDIENCE WITH FUMITO UEDA

#261
CHRISTMAS 2013

REVIEWS
ZELDA: A LINK BETWEEN WORLDS
BATTLEFIELD 4
ASSASSIN'S CREED IV
CALL OF DUTY: GHOSTS


POW
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POW

The comfort of the familiar against the rush of the new



It's been 80 issues since Mario previously appeared on the cover of **Edge**. That represents six years – a very long time in the fast-moving world of interactive entertainment. And yet he looks as at home there as ever, right?

It's testament to Nintendo's immutable standards that a 32-year-old character who's appeared in more games than any other remains capable of inspiring this kind of interest. How else could *Super Mario 3D World* appear front and centre at a time when the ear-splitting noise of new hardware launches from Sony and Microsoft is impossible to ignore?

It doesn't hurt Nintendo's cause that the introduction of PlayStation 4 and Xbox One is unaccompanied by a boundless selection of knockout next-generation exclusives. And of course hardware launches are always like this. Precious few game developers strike gold on day one, and it takes time for the industry as a whole to acclimatise to the foibles and associated demands of new platforms. It took Naughty Dog and Bungie a good while to give us *Uncharted 2* and *Halo 3*, and so too will we have to wait to see what PS4 and Xbox One can really do once they've built up a head of steam.

With Wii U, Nintendo has time and experience in the bank, and the benefits are made plain in *Super Mario 3D World*, a game that ferments some exceedingly familiar ingredients to create what feels like a palate cleanser at a time when so much game talk is coloured by topics like the power of the cloud and mingleplayer. It is telling, in fact, that *3D World* appears on a platform that comes packaged with second-screen functionality as standard and yet focuses instead on the traditional appeal up there on the big screen rather than allowing itself to be defined by accroutements.

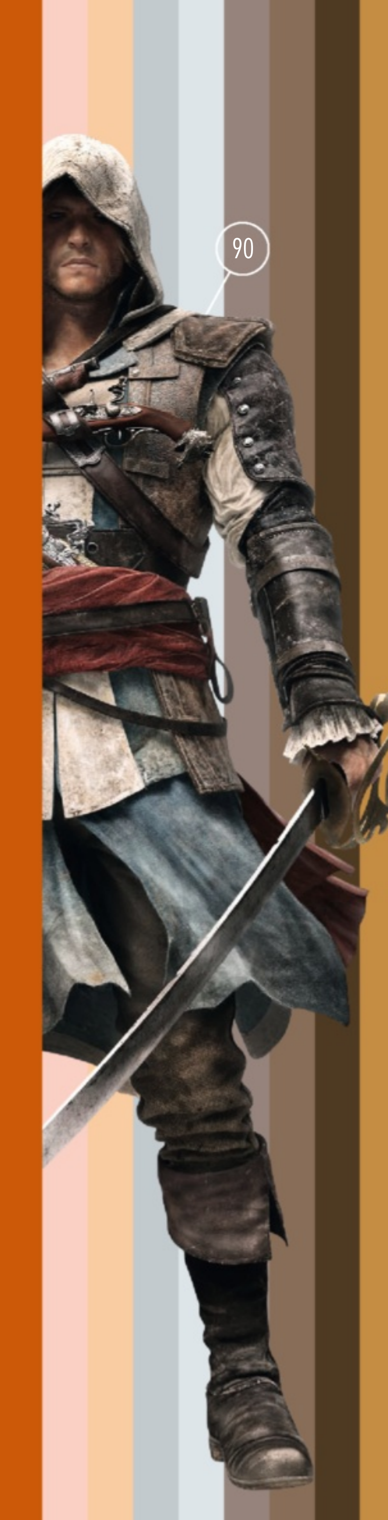
Which isn't to say that there's no merit in new ways to play. Another game reviewed this issue, Media Molecule's *Tearaway*, uses cameras, touch input and tilt control to extraordinary effect. Like Mario's new outing, it may be a title on an under-appreciated console (Vita in this case), but it's sure to keep anyone entertained while other, shinier platforms take their first, difficult steps.



games

50

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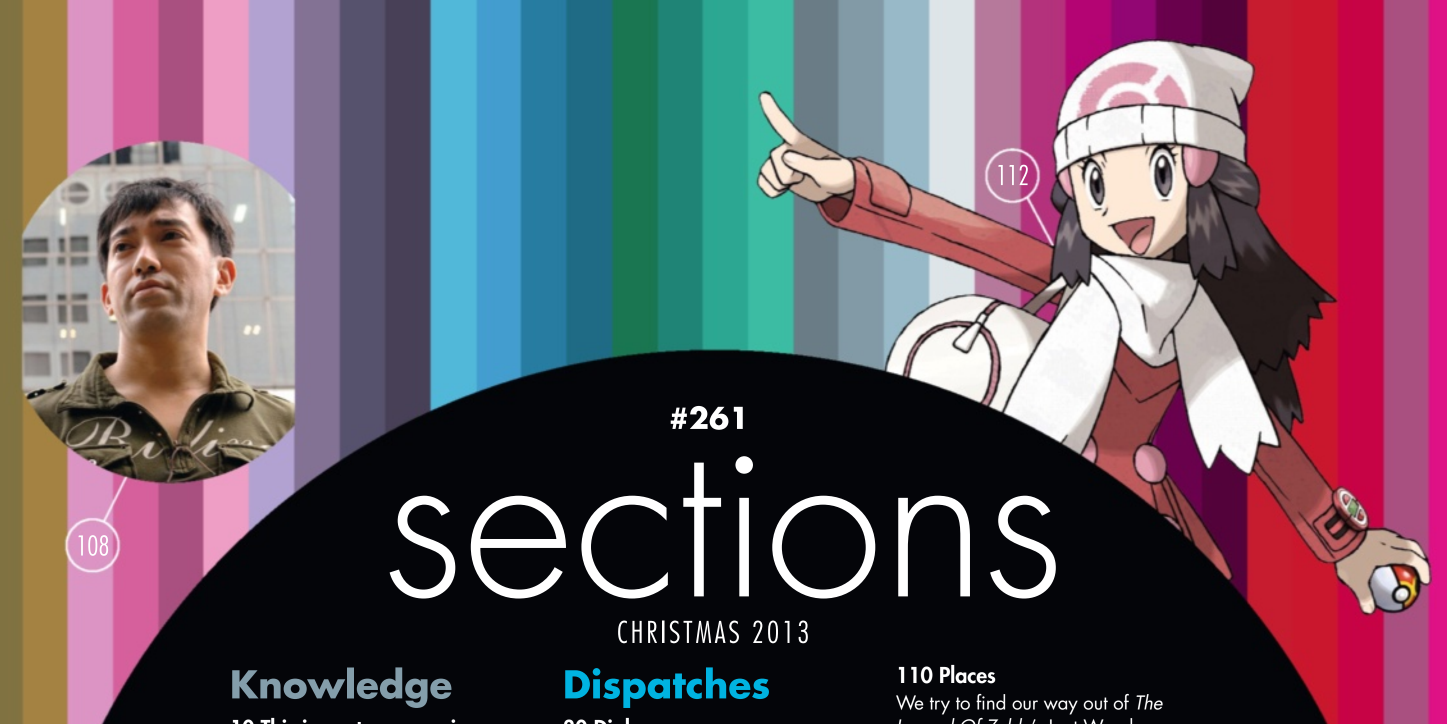




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CHRISTMAS 2013

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GAMING WORLD INSIGHT, INTERROGATION AND INFORMATION



WLEDGE

Next-generation hardware has finally hit the shelves. But while cross-gen games thrive at launch, not many studios seem willing to commit solely to developing games for Xbox One and PS4 (1). On p10, we ask the industry when this generation really begins. Namco Bandai's release schedule illustrates that point, with the company preferring instead to test new models in the free-to-play space. *Tekken*'s Katsuhiro Harada is heading up the publisher's initiative (2) and explains the motives behind its F2P experiments on p16. Meanwhile, Square Enix's own trials with unconventional models will soon open up its brands to being remixed by independent developers. Its new Collective programme (3) is explained in full on p18 by head of community Phil Elliott. We look to Japan to investigate the region's booming obsession with romance games (4) on p20, which is being driven in large part by female gamers and emerging societal trends. Back in the UK, a London-based organisation dedicated to technology evangelism and teaching consumers to become creators has built a do-it-yourself handheld console (5); we take a closer look on p22. Mark Rubin (6) weighs in on next-gen comparisons in Soundbytes on p24, and finally, in My Favourite Game on p26, writer and presenter Charlie Brooker (7) discusses the problem with boss fights, *Call Of Duty*'s storylines, and how games have informed his writing.



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Up-to-the-minute
game news and views



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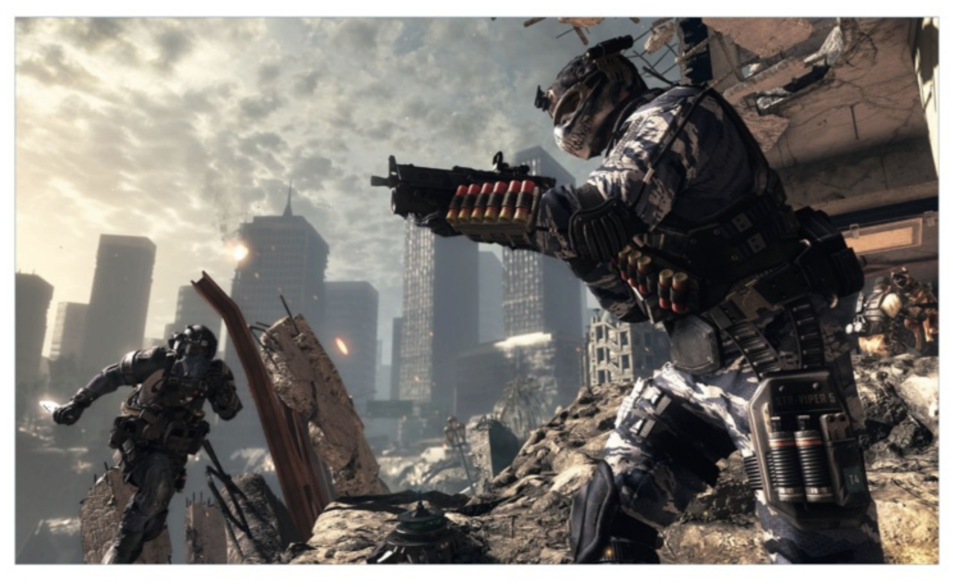

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Launch games are tricky propositions. This 1080-pixel-deep image from *Forza Motorsport 5* shows what Xbox One can do in optimal conditions, but a number of titles arriving on Microsoft's new console at its debut fail to hit such heights

This is next-gen gaming

We talk to the industry to ask: how much are Xbox One and PS4 being held back by concessions to old hardware?



***Call Of Duty: Ghosts* best demonstrates the difficulties associated with creating Xbox One games at this point in the cycle, the Microsoft version running at 720p versus PS4's 1080p**



The Fullbright Company's Steve Gaynor, developer of *Gone Home*

The next generation doesn't start when Microsoft, Sony or any other platform holder says so. It starts with the players who decide which console to buy, cascades down to the developers who decide which platform to develop on, and hits its stride when everyone is finally brave enough to write off 360 and PS3 altogether. Yes, hardware is hitting shelves this November, but the lengthy boot-up process for next-gen gaming is just beginning. Soaring development costs, a global recession, the reliable installed base of 360 and PS3, and systems still capable of fulfilling developers' visions means there's no sudden end point for the outbound seventh generation of game consoles.

"You can never forget that this is a business like any other business, and the goal is to make money," says **Sylvain Trottier**, associate producer of *Assassin's Creed IV: Black Flag*, explaining why the game's publisher, Ubisoft, found 360 and PS3's gigantic userbases hard to resist. "Dropping the current gen – with however many million consoles there are out there – is a key strategic decision. It depends on how much the executives are relying on your project for income on their yearly budget. We have lots of fans, but we also like lots of revenue. The company is counting on us."

It's all happened before, of course. But while 2005 and '06 saw the likes of *Gun*, *Hitman: Blood Money* and *Tomb Raider: Legend* ported to new hardware from Xbox and PlayStation 2, there was always *The Elder Scrolls IV: Oblivion* and *Call Of Duty 2* to mark out what PS3 and Xbox 360 were capable of. In 2013, the ongoing survival of the boxes sitting beneath millions of TVs threatens the viability of games that demand top-of-the-line systems to power forward-looking features.

There are three kinds of next-gen game. Some are designed exclusively for new hardware; they're usually platform exclusives – *Killzone: Shadow Fall*, *Forza 5*, *Ryse: Son Of Rome* – but there are a few thirdparty titles built exclusively for the next generation or high-end PCs, including *The Crew* and *Tom Clancy's The Division*. Then there are games such as *Assassin's Creed IV: Black Flag*, *Watch Dogs*, *Destiny* and *Need For Speed: Rivals*, which are being built to run at a current-gen spec then 'forward ported' to Xbox One and PS4, meaning they have the same core mechanics plus a few cosmetic upgrades. Finally, there are games built for the eighth generation then 'back ported' to the seventh, dropping features to run on lower-spec machines. *Titanfall* and *Battlefield 4* are notable early back ports, with the former being produced for 360 by an external studio.

Right now, the latter two types are far more common. Thirdparties are choosing to work across generations to maximise their potential audience, and games scheduled for as late as November 2014 are shipping with PS4 and Xbox One versions complemented by PS3 and 360 ports, or vice versa.

Oddly, many games touting 'next-gen' features or looks are forward ports. *Destiny* and *Need For Speed: Rivals* seek to mix single- and multiplayer design in revolutionary ways, but will also be coming to 360 and PS3. The colossal open worlds of *Metal Gear Solid V* and *Mad Max* are achievable on old platforms. Only *The Division*'s ambitious emergent playground seems advanced enough to demand a hardware upgrade, but it is still a year from completion. For the time being, an investment in a next-gen console is an investment in a minor increase in visual fidelity and little else. Years of bullshots have only exacerbated the issue, reducing the ways for games to show they have more processing power behind them down to mere flurries of particles and fancy lighting.

"Now teams can spend their time just making stuff, rather than figuring out how to make it run"

"For now, everything on the technical side just seems to be boasting about how we can have more particles and texture resolution and so on," *Gone Home* creator **Steve Gaynor** says. "I don't find that particularly interesting. But there will be a lot of advantages specifically for developers. It was such a pain to get high-detail games onto the last gen, just in practical terms, such as texture memory. Now teams can spend their time just making stuff, rather than figuring out how to make it run on the hardware."

Jake Rowell, lead artist at Infinity Ward, acknowledges that increased processing power and memory buffers are more useful to developers than





Q&A
Sylvain Trottier
Associate producer, *Assassin's Creed IV: Black Flag*

What were you and your team able to add to *Black Flag* on Xbox One and PS4 that doesn't exist on 360 and PS3?
For us, it was super important that we didn't want to end up with two different games. If you go with a next-gen and a current-gen team, chances are that over time the two games will split and they will become very different. It was part of the creative vision to say that we want the same game on all platforms with no gameplay difference and stuff like that. Starting there we said, "OK, where and how can we use the additional power of the CPU, GPU and memory so it looks different?" We came up with something we called 'the grandma test'. The idea was, if I put the PS3 version and the PS4 version on two TV sets one next to the other, I want a grandma to be able to tell me, "This is the new version." We wanted somebody somewhere to say, "This is next gen."

Where were lines drawn? You can add more characters to the crowds, but could you redraw every character with more polygons? Would that even make a difference in the grandma test?
The way the entire *AC* pipeline works, we always start with hi-res and do some magic to shrink down the textures and stuff so it fits in memory on current-gen [consoles]. Yeah, we increased the detail in the faces of the characters on next gen, but these are really light details… We did lots of R&D and we were looking at the before and after with the art directors – very qualified people – and increasing the polygon counts isn't something that was allowing us to pass the grandma test. You could only really see the difference when it was pointed out. Lighting, shaders, dynamic [flora]: they made a big difference.

How much manpower and time did it take to upgrade *Black Flag*?
It wasn't a gigantic team, because the bigger the team you have, the easier it is to split from the original game. So we had a few technical directors; an artistic director, who was vetting it; some super-good 3D programmers; a lighting art team, because we redid the entire lighting engine… A lot of the tech that was developed on next gen also ended up pushing the quality of the current-gen version.

How easy is it to get dramatic results from the next-generation platforms?
It was much easier. The new platforms are a lot closer to PC, so my engineers could do the R&D on PC and we knew it would work fairly easily on next-gen platforms. It needed to be adapted, but everything does. It's always a question of compromise about the effect, how it looks, and the performance it takes from the system. On PC, usually you don't really care about the performance, because the idea is that if it's not [running] fast enough, you buy a bigger GPU. Once you get on console, you can't have this approach. You can do the R&D as, 'Is it bringing something to the game?' And once we have a potential track, then somebody has to port it to console so it's not too expensive for the GPU's resources.



A shot from Ubisoft's next-gen *Assassin's Creed IV* trailer, minus the unnecessary enhancements applied to its PR-approved screenshots. *Black Flag* is a handsome game on Xbox One and PS4

Today's 360 and PS3 games are so different to those made back in 2006. Looking ahead, do you think there'll be the same kind of growth and development?
For sure. This is the first title for us on next gen. On current gen, the engineers are mastering the console, they know its eccentricities, all the tweaks you can do to make the GPU compute some stuff while other stuff is waiting. On next gen, it's all brand new. We are pushing the visuals, but I'm confident [that] engineers over time will find tricks to do the lighting we're doing in less time. For sure, they're going to master the art of doing next-gen games over the years, and we're going to be part of it. My engineers are already working on other titles and trying to learn from other teams.

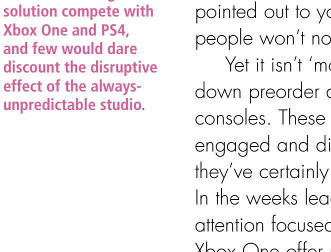
Many players are demanding next-generation games that are revolutionary. Would you suggest *Black Flag*'s Xbox One and PS4 update is revolutionary?
Is it going to change everything? No. Not us, because we wanted to push the visuals, pass the grandma test and many of the features we created ended up on current gen, too – like our companion app. Our job was to make a game for our fans, and we did everything we could to give them a beautiful experience on both platforms.

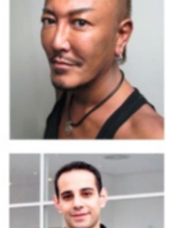
Is it better to develop on current-gen platforms and then upgrade that version for next gen, or is it better to develop a next-gen version and then cut content to make it work on current-gen machines?
I personally think that we made a good choice. It's a lot easier, and faster, to add a sugar coating on a cake than to remove the sugar from the cake. How do you do that without redoing the cake? If you do go from next gen and bring the port down to current gen, the challenges are a lot different and they require a bigger team.

How do you feel about reaching the point when you can make a game entirely for the next generation and exploit this new hardware to its fullest potential?
Honestly, as a developer, for me [the current generation] never felt like a handicap. It never felt like it was a ball and chain. Doing R&D on the next gen ended up being a bit of a kick in the butt, and we ended up bringing [over] even more tech that we never thought would work to the current gen. Would working on the next gen only be better? I never felt like working [across two generations] was worse. It never felt like it was a handicap that was slowing us down. At the same time, for example, [there are] new things that are introduced by the next gen, like Kinect, but it doesn't really blend in with the *AC* experience. A more precise Kinect isn't something that will help *Assassin's Creed*. I won't do the leap of faith in my living room for real.

Do you want next-generation machines as a developer and as a gamer?
As a gamer, of course. This is just the beginning; I want to see where they push it and where they're going to go. I am a big gamer, I play a lot of games – our games and also our competitors' games. As a developer, of course, yes, because we have been pushing the limits of the consoles for a long time, and getting new hardware forces us to do new R&D to make sure that we are not behind. We're always trying to ask a lot from our teams, so new hardware is important in order to make sure that we always move forward. I'm eager to see what else is going to come out on these platforms that we never thought about. It's impossible for a single team, even the biggest one, to think about everything. I'm eager to see where people are going to go. It's exciting days to have the launch of a new console.

THE VALVE EFFECT
With Microsoft and Sony building PC-like systems, do players really need a new console or just a new graphics card? Valve's entry into the next-generation space came at the end of arguably the most exciting month in PC gaming history. Games For Windows Live died, Mantle began the process of phasing out DirectX, G-Sync eliminated screen tearing forever, and then suddenly Valve joined the party with a new gaming-oriented operating system, controller and box on which to run PC games. Next year will see Valve's living-room solution compete with Xbox One and PS4, and few would dare discount the disruptive effect of the always-unpredictable studio.





Yakuza **producer Toshihiro Nagoshi (top); DICE producer Daniel Matros**

noticeable to players. "One of the things we realised on *Modern Warfare 3* was if we make all our assets from a hi-res source, even if we can't put it in the game, we can bake down for the best possible fidelity. Whether it's on PC or [360], if the average person is looking at it, it looks roughly the same."

In Japan, *Yakuza* producer **Toshihiro Nagoshi** also believes the generational difference will be lost on the layman. "Both PS4 and Xbox One offer much better performance, so games can run at 60fps more easily and you can make better AI," he says. "But it's just the little details. Up until now, we'd have had to sacrifice some of those details. But I don't think most gamers care about those little things – you'd notice them if they're pointed out to you, but I think most people won't notice the difference."

Yet it isn't 'most people' who put down preorder deposits on new consoles. These players are more engaged and discerning than ever, and they've certainly noticed the difference. In the weeks leading up to launch, attention focused not on what PS4 and Xbox One offer so much as what they don't. Infinity Ward could only get *Call Of Duty: Ghosts* running at 60fps on Xbox One by cutting its native resolution to 720p; the PS4 version runs at 1080p, but struggles to maintain a steady framerate. Despite all this supposed power, PC is still the only place to play *Battlefield 4* at its highest visual fidelity.

"This might sound harsh, but our job was not to make consoles sell. Our job was to make a game for our fans"

And it's not solely a thirdparty, cross-gen concern. Microsoft's early talk of *Dead Rising 3*'s dynamic resolution, which would apparently scale according to how much was going on onscreen, gave way to an admission from its executive producer that it now runs at 30fps in 720p. *Titanfall*, perhaps Xbox One's brightest prospect, will also run at 720p. With every new confession, the traditional fizz of hype for a new generation of consoles has been diluted by disappointment. Yet those on the creative side think differently.



***Driveclub*'s delay denies us one of the few far-reaching titles for PS4's launch. It's expected in early 2014**

"Progress is always good," says *Thomas Was Alone* creator **Mike Bithell**, whose new game, *Volume*, will debut on PS4 and Vita. "For me, all this hardware power just means more toys to play with, and more room to worry about things I enjoy more than optimisation. From my perspective, the most important shift is in the growing support of indies. Players, rightly, don't really care about anything but getting good games. Fingers crossed those goals overlap."

At launch, however, PS4 and Xbox One mostly offer the same old toys as ever. *Assassin's Creed IV: Black Flag*, *Call Of Duty: Ghosts*, *Battlefield 4*, *FIFA 14* and *Need For Speed: Rivals* are due to be some of this Christmas's biggest console games, yet they are all cross-gen and many of them are out sooner and cheaper on older hardware. Meanwhile, platform-exclusive launch titles – now reduced on PS4 in the absence of the delayed *Driveclub* and sparse on Xbox One too – present a weak case for upgrading on day one. For all of Xbox One's broad entertainment options, six months of feedback would suggest players want next-gen games on their next-gen consoles. But the kinds of games only possible on these systems aren't due to arrive until the forward ports begin to dry up. Gaynor is confident things will improve: "At some point, there will be a team that does something new because of the hardware itself. There will be a eureka moment." That, however, could be years away.

"Everyone's still scratching the surface right now," says DICE producer **Daniel Matros**. "Two years after PS3 and 360 came out, studios started nailing it, and I think we'll come to that maybe in two years with PS4 and Xbox One. That's when the next generation will *really* begin for a lot of people."

Yet even he can't promise that the next *Battlefield* will leave old hardware behind. "We'd need to look at our userbase. Are most of them current-gen players? How many of them are going to buy it on next-gen [consoles]? How many are going to buy it on PC or current gen? I think that's a decision that needs to be made, but further down the road."

It undoubtedly makes sense for developers, and it's good news for those sticking with 360 and PS3. But right at this moment, the current generation is holding the new one back.

"[Forward porting]'s not necessarily what the platform holders would have liked us to do," says Trottier. "They would have liked us to serve the next gen and provide social features that are next gen only. But for us, it was important that we respect our fans. This might sound harsh, but our job was not to make new consoles sell. Our job was to make a game for our fans."

Unfortunately for those with next-gen preorders, the majority of those fans are to be found on old hardware, and will take convincing to make the switch. ■

Insert no coins

Why Namco Bandai's biggest names are being attached to its experiments in free-to-play gaming

Tekken Revolution is free to play. Released in June exclusively for PS3, it has a starting roster of eight characters, and features both solo and multiplayer modes. Each play costs a virtual coin, which regenerate at a rate of one per hour in singleplayer or per half-hour for online. When these run out, you can buy Premium Coins from the PSN Store. It's just one of Namco's many experiments in free-to-play gaming.

Tekken boss **Katsuhiro Harada**, who is heading up Namco Bandai's adventures in F2P, notes that, far from being a futuristic or even contemporary model, the approach has its roots in the same place as Namco: the arcade. "The outlay in the arcade is very low. For just ¥100, you can try out a game, or a particular character in that game, and see whether you like it," he says. "So this is a way to attract new players who might be interested in *Tekken*, but [aren't] necessarily willing to spend $59.99 to try it."

Namco Bandai's first F2P trial run with a big-name series came at the suggestion of board members in June 2012, who felt a new approach could work for its *Gundam* games. It did. *Mobile Suit Gundam: Battle Operation* is a six-on-six mech battler, and its daily limit pay model brought in ¥700 million (£4.4 million) in months, success enough to persuade the company to try going F2P with some of its other key series. Since then, Namco has announced *SoulCalibur: Lost Swords* (PS3), *Ridge Racer Driftopia* (PC/PS3) and *Ace Combat Infinity* (PS3).

"When we first started planning this a year or so ago, Sony was the only platform holder that was interested in supporting F2P titles," Harada says, explaining why PS3 has become the main platform for these games. "We released *Tekken* as quickly as possible, because we wanted to gain knowhow and see the fans' response."

As one of Namco Bandai's flagship titles, the *Tekken* series has sold some 44 million copies worldwide, and *Revolution* has garnered over two million downloads since June with little promotion. Harada won't reveal how many players are choosing to pay, but hints that the figure is below ten per cent. "The virtual coins are much cheaper per play than in the arcade, but we've found that the act of using a credit card to buy coins is an obstacle for a lot of players," he says. "I'd like to see a virtual currency on PSN that works across all games."

> "For every 1,000 people who try the F2P version of each game, I think a few will become loyal fans"

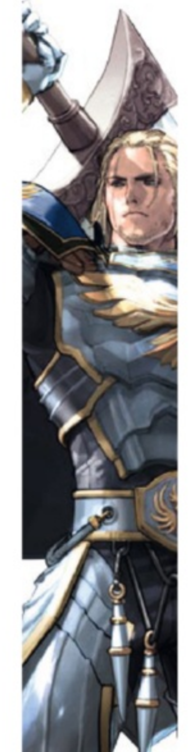
The obvious drawback to applying an F2P model to a game traditionally sold in a box is that revenue comes not on release day but over an extended period – or possibly never. Counteracting this means spending less on development. In *Revolution*'s case, Story Mode was the first to go, resulting in a lean package that is closer to an arcade version. Instead, there is a levelling system, unusual for *Tekken*, in which your character's stats improve the more you play. Interestingly, this feature can be turned off in non-Ranked Matches, and over half of players do just that, suggesting that they don't care for it.

"It's not a pay-to-win system, though," Harada insists. He has a point: players are pitted against similar-level opponents in Ranked Matches. "Also, someone who doesn't play *Tekken* much but has grown their character to a high level would probably not be able to beat someone like me who plays a lot, even if I use a very low-level character."



Katsuhiro Harada is heading up Namco's free-to-play initiative

Harada's team will be watching *Revolution*'s trends closely and applying its lessons to *Ace Combat*, *SoulCalibur* and *Ridge Racer* as those F2P versions prepare for launch. Each will have its own methods of monetisation. In *Ace Combat*, due this year, four-on-four dogfights will require fuel top-ups, though the slimmed-down campaign will be free, which is similar to *Revolution*'s single- and multiplayer divide. *SoulCalibur: Lost Swords*, however, will take the opposite approach this winter, with no multiplayer mode at all. And *Ridge Racer Driftopia* has gone through public beta on PC and PS3, revealing a model where race-ending crashes beget paid repairs.



Harada doesn't expect these titles to see as many downloads as *Tekken Revolution*, at least not without some more traditional promotion. He also says that downloads of *Revolution* in Europe – *Tekken*'s biggest market, accounting for roughly half of those 44 million sales – have been slower than elsewhere, which is perhaps an indication that hardcore fans are not very interested in an F2P version of one of their favourite series. But as a way to attract new fans to a long-running series, adopting a free-to-play approach has proven to be sound.

"For every 1,000 people who try the F2P version of each game, I think a few will become loyal fans," Harada says. "That's one of the reasons we've gone out of our way to try this experiment – we need to bring in new blood." ■







Ace Combat (above left) will have a free short campaign but charge for multiplayer, a lesson it has seemingly learned from *Tekken Revolution*'s token weighting (above right). *Mobile Suit Gundam: Battle Operation* (below) for PS3 uses the now-staple energy system for limiting its free plays

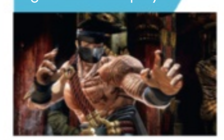






FREEDOM FIGHTERS

The early jabs at making fighting games free to play



By a quirk of timing, *Tekken Revolution* is not the only high-profile F2P fighting game right now. Tecmo Koei released *Dead Or Alive 5 Ultimate: Core Fighters* in September for free, selling various game modes and characters as paid DLC. And a rebooted *Killer Instinct* will launch with Xbox One, offering one free character in, as Microsoft calls it, "the world's most generous demo", raising the nightmare scenario of a million Jago-vs-Jago fights. "You'd be lucky if that happened to be the character you like to play with," laughs Harada. "But it's hard to say what model will work best for a fighting game. I think it will be another ten years before F2P fighting games are truly commonplace."



Ridge Racer Driftopia (top left) features several of the usual F2P tricks, including booster items and collectible cars. But its innovation is that cars can be wrecked, requiring repair kits to fix lest they be scrapped. Meanwhile, *SoulCalibur: Lost Swords* (above) has been streamlined to aid newcomers



Lynch mob

Square Enix is inviting indie developers to explore its bulging vault of intellectual property

Square Enix has a back catalogue of inestimable worth. *Final Fantasy*, *Dragon Quest*, *Tomb Raider* and *Deus Ex* are still in active development, but it owns precious series as old as gaming itself. So why would it unlock those vaults and allow upstart videogame studios to help themselves to its valuables, not least when the company has a long record of shutting down fan-made projects that infringe on its copyrights?

Phil Elliott is the architect of the initiative, which is dubbed Collective. He believes there's been a shift in the past two years in the way in which Square Enix works with its fans, many of whom want to modify its games or create their own spinoffs.

This shift is best exemplified by the story of an Australian group of modders who are working on building multiplayer support into *Just Cause 2*. Rather than issuing them a cease-and-desist letter, Elliott decided to find a way to work together. "The *Just Cause 2* multiplayer mod was something we thought was really cool," he says. "Lots of people [were] clearly having a lot of fun with the game in a way that we hadn't intended. To be able to give it our blessing, we needed to put in place a free licence agreement. We've never done this before, so it took a while, but once we reached an agreement we even went so far as to publicise the beta tests."

This deal dovetailed with two problems that Elliott and others at Square Enix had been pondering: how to involve its community in the development process and how to support the indie game space. "It's pretty clear that any creative industry needs to have a strong pipeline for new ideas and fresh talent to come through," he says. "The indie games sector is vital for the future strength of the industry, so that's something we want to try to support. Those were our starting points for Collective, and over the past six months we've spent a lot of time seeking feedback from the development community and tweaking the idea accordingly."

> "Any creative industry needs to have a strong pipeline for new ideas and talent to come through"

As it stands today, Collective enables developers to upload their game pitches and potentially have them shared with Square Enix's audience. In the first step of the process, the publisher will showcase potential projects to a sizeable fanbase. Then, if those ideas resonate, Square will take the team through a due diligence process to be certain that it has the expertise and tools to deliver. Finally, and only if the developer decides this is the route it wants to take, the game will be promoted by Square Enix through a special relationship with crowdfunding platform Indiegogo. If successfully funded, Square Enix will even help to distribute the game, potentially opening it up to entirely new markets.

Square Enix won't be offering direct funding for new games, at least not initially. Its primary role will be to help projects rise above the crowdfunding noise. The cost for all this support will, Elliott promises, be slight. "We will take a cut to cover platform costs, similar to the cut that Kickstarter or Indiegogo would take. And then if we distribute a finished game, or it uses some of our IP, we'll take a cut for that, too. I think if we're actually going to support indie development, we shouldn't be taking much out of the system, so the developer would take the vast majority of sales revenue. On top of that, we want to reinvest the money we make from the Collective back into the platform, which means that in time it may fund games directly."

On the specifics of opening up the IP vaults so developers can use Square Enix's characters or worlds in their titles, the company is less clear. Japanese IP (which includes *Final Fantasy* and *Dragon Quest*) will be off-limits initially, which means no indie-made *Chocobo Farm* or *Tetra Master With Friends*. Other than that, there are simply guidelines in place. "Games will need to be digital-only, they'll need to be created for the PC platform and they'll need to use the IP in such a way that doesn't bring it into disrepute," says Elliott. "Broadly, we won't accept anything that we feel could damage the franchise, or infringe anybody else's [IP], but that could differ depending on which IP was being discussed. Hypothetically speaking, if *Kane & Lynch* were available, we'd probably expect some more mature elements within the game pitch – but those same elements wouldn't be acceptable in a *Gex* game."

If a game is funded, however, Elliott promises the publisher will be hands-off: "We're there if a developer asks for advice or guidance, or if needed we can make introductions to other teams or service providers, but they are directly responsible for the crowdfunding and making the game. We would encourage the development process to be as open with the community as possible, but again that's up to the game maker." ■

TRUST FUND
Elliott hopes that Square Enix's expertise can help rebuild the trust damaged by crowdfunded projects that have failed to deliver on their initial promises. "A trust issue has emerged in the crowdfunding environment. I believe the majority of developers [that are] posting pitches on crowdfunding platforms can be trusted, but we're seeing headlines regularly about that trust breaking down. At Square Enix, we're used to working with thirdparty teams, and we do some pretty rigorous due diligence on those teams before we sign them up. We can't guarantee that a Collective developer will create the game that they say they want to, but we will use our teams to assess the plan, so that at least you can get a sense that you're backing a team that has the capability of making that game."



Head of community Phil Elliott crafted the Collective initiative



Eidos characters and series acquired when Square Enix bought the publisher in 2009 are also potentially available for indie pitches, which could bring new spins on *Kane & Lynch*, *Fear Effect*, *Legacy Of Kain* and *Timesplitters*

Playing with hearts

With real-world romance on the wane, women in Japan are turning to videogames for love

More so than most Japanese games, romance sims are built on cultural values and social norms that don't translate well outside of the nation's borders. But the genre is booming, driven by the rise of mobile devices and the demand from Japanese women.

A glance at Tokyo Game Show 2013's dedicated romance gaming stand proved demonstrative. Instead of the friendless male otaku of stereotype, the area was flooded with girls. They were there to see games that fall within the subgenre of romance games known as otome (maiden) sims.

In these games, the player is given her pick of manga-style men, who then strikes up a text-heavy relationship with her. Such exchanges are usually designed to whisk her off her feet via a mixture of romantic utterances and gentle humour.

The romance genre's sudden surge in popularity among women appears to be linked to recent societal trends in Japan, where marriage and birth rates are nosediving. A 2011 government survey revealed that 61 per cent of unmarried Japanese men and 49 per cent of unmarried women aged 18–34 did not have a partner. Such trends are reflected in a rising number of relationship services aimed at young singles, from matchmaking websites to shadier businesses offering instant gratification. Against such a backdrop, is it any wonder that the immersive medium of videogames is helping men and women fill the social void?

And the audience is a broad one, stretching beyond gaming's traditional boundaries. "Rather than hardcore gamers, our users tend to simply be women who are looking for love but have no luck," says **Satomi Muro**, a planner and scenario writer at ZZYZX, which makes *Kokuhaku* (*Black & White*). At the time of writing, the game has about 12,000 users and, like most otome titles, it is free to download, with either a pay-per-story system or monetised items and social features providing revenue.

"Our users tend to be working women in their 20s and 30s who play on the train going home from work as a way to recover from the exhaustion of their day job by finding romance in a fantasy world," says **Hikari Mizukami**, another scenario writer who works at Elementree. The studio's *Hakkenden* (*Legend Of Eight Dog Warriors*) has about 20,000 players, and offers liaisons with blade-wielding heroes in the Warring States period of Japanese history.

"Women are not looking for the brash sexual titillation that men want from their romance games"

"According to the surveys we conduct with our players, women are not looking for the brash sexual titillation that men want from their romance games," says **Yuta Ogi**, a spokesman for Voltage, a leading publisher of love games whose *Chikai No Kiss Wa Totsuzen Ni* (*Kiss Of The Sudden Oath*) has been downloaded a million times. "Instead, women prefer something that reflects the tenderness and excitement of a real-life love relationship. They want to hear the sweet words that their boyfriends never say, and to enjoy everyday moments with their crush."

Download figures can be misleading, but it appears sales are high in the genre, too. "I can't give out our exact figures," says Sunsoft's **Wakase Basashi**, director of the *Ore Pri* (*I Am Princess*) series, "but around 20 per cent of our 200,000 users pay to play, which is a much higher conversion rate than most social games." *Ore Pri* is a boys' love or 'BL' game, a subgenre in which all the characters are homosexual men. Its lead complicates things further by cross-dressing. "Most otome games are about a female protagonist finding romance with a hunky guy, but I prefer BL games," Basashi says, "because it's a slightly more niche subgenre. I make the games in such a way that fans of regular otome games can get into them, too – hence the male character wearing women's clothes."







From top: ZZYZX's Satomi Muro, Tomoya Ike from Comfort and Elementree writer Hikari Mizukami



While diversity is an ongoing issue for the western industry, one positive side effect of the otome genre is that it is attracting women to the development of games. "Most of the production staff are female," explains **Tomoya Ike** from Comfort, which makes *La Storia Della Arcana Famiglia* for PSP. "All the top experts behind these games are women and they're very closely in touch with the fans. Women can make the games from the player's viewpoint."

But it is still a rare corner of Japan's game industry that is staffed by and aimed primarily at women – the heads at Sony and Nintendo are always male, as was every game director we met at TGS. Perhaps that is due to change. Modern Japanese women are rising through the workforce, targeted by companies to make up the shortfall in young workers. And as these women endure Japan's long hours and marathon commutes, the decline in opportunities for socialisation and romance may only fuel their desire for more otome games. ■



Two examples of BL games from Elementree (above) and Sunsoft (below). These games revolve around the relationships of homosexual men



In *My Forged Wedding*, players enter a sham marriage with a guy. The frisson, of course, is that it might turn into true love





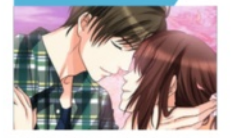




Teenage gamers flocked to the latest *Arcana Famiglia* PSP title at TGS 2013 (above), while *Ore Pri* creator Wakase Basashi (right) represented her game's cross-dressing hero/heroine

LANGUAGE OF LOVE

The otome games heading west



Voltage is one of the few otome publishers to release games in English. Its most popular game is *My Forged Wedding*, a translated version of *Chikai No Kiss Wa Totsuzen Ni*, in which the player enters a sham marriage that could end in virtual romance. "Some of the games we translate into English with the visuals untouched, and these appeal to fans of Japanese games and anime," says Yuta Ogi. "But we also have a subsidiary in the States, Voltage Entertainment USA, Inc, where we tweak the artwork and characters for other games to suit the local market. American women like men who are more manly and macho."



KIT BASH

The handheld that has to be built to be played

Technology Will Save Us is a company that makes kits and runs classes to turn consumers into craftsmen. It can help you make a tiny synth, a pair of programmable LED glasses, and now a console.

"We tried to go back to the archetype of a gaming device," says product designer and 'creative technologist' **Michail Vanis**. "The screen only has 64 pixels and no colours; the buttons are just the classic up, down, left, right and start; and the sound is a monotone speaker. We were really inspired by those keyring-sized Game & Watches Nintendo used to make, because [they] stripped everything complicated for a really simple gaming experience."

The DIY Gamer unit is a handheld stripped to its barest essentials and sold as a construction kit. The point is to illustrate the workings behind things that users take for granted.

"We made a connection with one 15-year-old from Hackney, who made a full version of *Snake*," says Vanis. "It's an obvious [game], but he had to learn how to make it from scratch – to make an apple disappear and make the snake grow longer. Someone's made a fully fledged *Super Mario* on the 8x8 display. Mario's basically a dot, he moves around, collects coins… It's kind of come back to that Nintendo inspiration."

Feeling inspired? The DIY Gamer Kit is available to purchase now from technologywillsaveus.org for £60. ■

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Soundbytes

Game commentary in snack-sized mouthfuls



"It seems a little bit dicey to me.

If it were some other random company, I would be pseudo-scornful, but it's Valve, so I'm not."

Having scoffed at Steam once, **John Carmack** has learned his lesson for Steam OS

"Adding a **Star Wars brand is not innovation.**

I wish they had put as much innovation and energy into the code as went into the other stuff."

Former EA boss **John Riccitiello** takes aim at the all-conquering *Angry Birds*

"If you do the same thing as others, it will wear you out.

Nintendo is not good at competing,

so we always have to challenge by making something new."

Satoru Iwata on the philosophy that birthed Nintendo's Wii U, 3DS and, um, Vitality Sensor

"I think both look great. Some people might notice

if they had them right next to each other. Some people might not."

Infinity Ward's **Mark Rubin** plays down the power gap between PS4 and Xbox One

ARCADE WATCH

Keeping an eye on the coin-op gaming scene



Game *Wangan Midnight Maximum Tune*
Manufacturer Namco Bandai

The same manga underpinnings that have made *Wangan Midnight Maximum Tune* and *Initial D Arcade Stage* a success in Japanese arcades have also made Sega and Namco reluctant to translate the pair, and both have gone without localisation since 2007.

Wangan Midnight and *Initial D*'s almost simultaneous arcade debut in 2001 was a coincidence, but the success of the latter saw Namco return to the drawing board for 2003's *Maximum Tune* update, dumping the original game's lightweight handling for something deeper and more complex. It's that edition which forms the basis for the modern game, with Namco now wheeling its fifth revision of the template into arcades for location testing.

Wangan Midnight is a curious phenomenon in Japan, its graphics and handling models outclassed by countless racers on home consoles. But the thrill of head-to-head competition is a powerful draw and adherents to both games compete in Japanese arcades. While Namco Bandai's aggressive *Dead Heat* and Sega's licensed version of Codemasters' *Grid* do battle in the west, *Wangan Midnight* is trapped in the east without even a home console port for western players. On the modern competitive gaming scene, only fighting games seem to cross the arcade/home divide, and the age of the 'arcade perfect' port is long over.



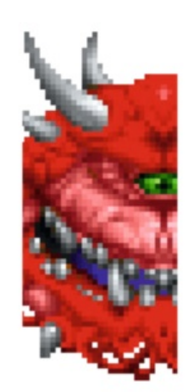
My favourite game Charlie Brooker

The satirist on why gaming needs Raiders Of The Lost Ark moments and why he could have died happy after Doom

Charlie Brooker has an atypical CV. He started his career in the mid-'90s while reviewing games for PC Zone. After a stint as a newspaper columnist, he's now perhaps best known as the writer and presenter of scathingly satirical TV show Screenwipe. Here he turns his attention to videogame conventions, daft stories and microtransactions.

As a former game journalist and a recent parent, have you found your taste in games changing over the years?
I don't know if my taste in gaming has altered, really, because games themselves have altered. I probably find violence a little more depressing than I used to – I don't know if that's a boring parental thing or a boring getting-older thing. Sometimes I'll look at things and think, 'Really?' I enjoy the *Call Of Duty* games, but I wish they would just throw that story away. When are they going to stop saying "fuck" just to prove that it's hard and tough, you know? "Motherfucker! Shit's gonna get fucked up, motherfuckers…" And then through all of this it's "Mason! Masooon!" Anyone who has ever cared about any of those characters in any of the *COD* games is fucking stupid. That's like caring about a slab of ham. It's mainly just the storytelling side of things that annoys me now. It probably shouldn't, but I just object to it in the *COD* games, because they seem to think, or suggest, there's a sense of depth to them. I wish it was just like *Bulletstorm*. If the cutscenes were just goofing around, with more of a *Saints Row* sensibility, then fine. But don't fucking pretend you're making Apocalypse Now. Please.

TV GAMES
As part of Channel 4's gaming night on November 30, Brooker will present a one-off, two-hour special entitled How Video Games Changed The World. The show will look at the rise of videogame culture, examining Brooker's picks of the most influential and iconic games from *Pac-Man* onwards. The documentary will include interviews with key figures from the industry, including *Pong* creators Nolan Bushnell and Allan Alcorn, and *The Sims'* Will Wright. Among other contributors, *Tomb Raider* writer Rhianna Pratchett and actor Felicia Day will offer their perspective on how games have affected the modern world, and look out for celebs such as Jonathan Ross and Dara O Briain.



How did you feel about *The Last Of Us*?
Even with *The Last Of Us*, which I think has got probably some of the best writing I've seen in a game — the way they underplay a lot of the cutscenes, it's very affecting – by the end you've massacred about 10,000 people. So really all this misery of dwelling on what you're having to do is [insincere]. By the end it should be like doing the washing up.

At least there weren't any traditional boss fights in the game.
Whenever I encounter a boss in any game, I'm just hugely depressed. Because I think, 'Here we go, this an artificial barrier to me getting the next bit of the game, so I basically have to lumber around slowly working out which bit I have to hit of this giant monster that's going to spin around'. It's like I have to learn a dance routine. Just stop it! No game has ever benefited from a boss fight, surely. No one's ever gone, "Oh good, a boss fight. Brilliant! I can't wait to get to the boss level." When you're doing a boss fight, it's like you're doing the washing up and turn around and somebody's put another pan down. Why can't we have that one great moment in Raiders Of The Lost Ark where the guy comes out and swishes his sword and Indiana Jones just shoots him?

> "Anyone who has ever cared about any of those characters in any of the COD games is fucking stupid"

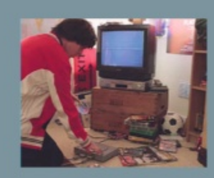
Going by the Black Mirror episode Fifteen Million Merits, you have a dim view of microtransactions, too.
That was absolutely at the forefront of our minds when writing it. It came about when my wife was watching me struggling with an Xbox, an iPad, an iPhone and a laptop all on at the same time. She was like, "What the hell are you doing?" And at the same time, I'd been fiddling about with Kinect and it was easy to imagine an extrapolation of this world where everything incrementally costs you something and everything is a distraction. Everything seems happy and fun, but actually it's fucking miserable. There were lots of things in that episode that we're taking the piss out of, but micropayments were definitely in our heads… In the second series, we did an episode called White Bear where the look of the hunters was based on *Manhunt*. I got an email from Sam Houser, who'd seen it and liked it. I like to put little games references into things. There was a reference to Miyamoto in A Touch Of Cloth.

Can you single out a favourite game?
I really couldn't pick just one. *Doom* was an amazing game, but then I could easily say *Tetris*, or flipping *Civilization*, and I was obsessed with *Tekken*. The problem with picking one game, obviously, is that games do improve technically in what they can do. But I do think that if you'd said to me when *Doom* came out, "That's it. There are no more games," I think I'd have gone, "OK, fair enough, because they don't get better than this." So if I was ignorant of everything that was to come, I think I'd have picked *Doom*. ■



Brooker is a screenwriter of some repute, having worked on such cherished shows as Brass Eye, Nathan Barley and Black Mirror. He also co-writes cop spoof A Touch Of Cloth, which airs on Sky1

WEBSITE
Spelunky Generator Lessons
www.bit.ly/1b16r9G
There is a growing concern surrounding procedural generation: that clever algorithms are taking the place of level design, with players expected to forgive the odd randomly generated duffer. The natural counterpoint to that is *Spelunky*, which consistently throws up levels of such devious ingenuity that you'd swear they were the work of a designer's hand. Darius Kazemi's Spelunky Level Generator is a two-part explanation of how Derek Yu's algorithm functions, focusing first on the creation of levels with a navigable path to the exit, and then the placement of enemies and traps. It's not made us any better at the game, but it's a fascinating insight into the science behind all those horrible deaths, and a fine guide for both hobbyist and professional developers.



VIDEO
PlayStation Since 1995
www.bit.ly/1gxumVh
Sony's For The Players promo is all the evidence anyone needed that it has finally remembered how to sell PlayStation again. The three-minute video is a journey from 1995 to the present, passing through almost every version of every PlayStation and the fashions of the eras. Given that it focuses on a man who has apparently been living in his parents' house since 1995, it's also a sad comment on the absence of affordable housing in the nation's capital. But the subtext is buried deep enough to ensure all you'll notice is that PlayStation is cool again.

WEB GAME
Clicking Bad
clickingbad.nullism.com
If even an impending console generation wasn't quite enough to fill the profound sense of emptiness that manifested itself as Breaking Bad's finale came to a close, *Clicking Bad* might be just the relapse you need. Essentially a spreadsheet, *Clicking Bad* distills down the compulsion loops of free-to-play games and packages the result in the unlicensed skin of the highest-rated TV series of all time. Starting without cash, you must manually cook batches of methamphetamine by clicking, then manually sell them for a paltry profit. As your ill-gotten gains amass, you'll be able to buy dealers, better equipment and even sleazy lawyers to help keep you off of the DEA's radar. But we doubt even Saul could get you off the hook when your boss catches you checking on your meth empire for the third time in a day.

THIS MONTH ON EDGE

The addictive substances that stole our attention during the production of **E**261

GAMING LAPTOP
Razer Blade
Tablets and handhelds are all well and good, but who hasn't found themselves on a long-haul flight jabbing disconsolately at an iPad screen and wishing they were playing *Dark Souls*? Weighing just 1.8kg and 1.67cm thick, the 14-inch Razer Blade is certainly a fine fit for cabin luggage. And with an Intel Core i7 processor, Nvidia GeForce GTX 765M card and 8GB of RAM, it's got the grunt to handle even the notoriously unoptimised likes of *Metro 2033*. Its battery life isn't the best – you'll only get three hours of play on a particularly resource-hungry game – but if you can afford the Blade's starting price of $1,799, you can probably stump up for in-seat power, too. It's a small price to pay for the privilege of fighting Smough and Ornstein somewhere over the Atlantic.



continue	quit
Wii U returns Can one game save a console? If anything can, it's surely *Mario*	**Wii ends** Production has ceased on the best-selling Nintendo console ever
G-Sync Nvidia kills off screen tearing and VSync in one fell swoop	**720p *Ghosts*** Hardly the next generation players were promised, hmm?
GFW dies The despised Games For Windows Live is finally banished to the ether	**GFW dies** Of course it had to take our game saves down along with it
Edge babies One future addition to the readership already, with another to follow	**Sleepless nights** More time for *Dark Souls*. We'll sleep when we're dead



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TWEETS
The only "monetizing" I need is: You pay me for my game. I give you something that you'll have fun with. That's it.
Jeff Minter @llamasoft_ox
Indie developer

Companies have figured out that laying almost everyone off, ie "staff reductions", isn't as damaging a headline as "studio closure". Classy.
JP LeBreton @vectorpoem
Designer, Double Fine

Board games: for when you want to spend several hours learning a game only to find out you don't like it.
Anthony Burch @reverendanthony
Writer, Gearbox Software

At this point I'm rarely shocked by misogyny in games but my jaw actually dropped while watching the *Ninja Gaiden Z* "Miss Monday" trailer.
Anita Sarkeesian @femfreq
Creator, Feminist Frequency





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DISPATCHES
CHRISTMAS

Within Dispatches this issue, Dialogue sees **Edge** readers abhor the term 'replayability' and praise mission skip features. You also question the ways in which games invade our privacy and seek to open a discussion about *GTAV*'s more controversial aspects. Elsewhere, **Steven Poole** asks why developers are afraid to embrace the mimetic potential of touchscreen murder, **Leigh Alexander** draws parallels between theatre and videogames that go far beyond a mutual reliance on actors, and **Brian Howe** lists the three worst eSports injuries ever to befall eAthletes.



www.edge-online.com
Discuss gaming topics with fellow **Edge** readers



Issue 260

Dialogue

Send your views to edge@futurenet.com, using 'Dialogue' as the subject. Letter of the month wins a PS Vita

Peaced off

Since the beginning of my gaming life over 25 years ago, arguments have been raging about which console is superior. (Of course, back then it was more about which console you were bought by your parents than your own personal preference.) Today, I find myself absolutely shocked at the borderline extremist followings videogame companies can attract. Is this vicious schoolyard rivalry really still relevant in this day and age?

In past generations, exclusives were an important factor in choosing which console to buy, but these days the highest-grossing titles are available on PC and often more than one console. You'd think that would be the end of it, but instead people dissect gameplay footage for frames per second and pixel counts.

We should unite and enjoy gaming instead of proving one thing is better than another. Such a coming together proved effective in reversing Xbox One's DRM policies. I own all three current-gen consoles and I love them all for different reasons. Let's cease the hostilities and make our hobby as enjoyable as possible. I'll leave PC elitists for another time…
Adnan El

Version comparisons can be petty, but the furore over *Call Of Duty: Ghosts'* obvious resolution disparity also shows why they matter. Console consumers want to be sure that they're getting the best value for their money, which can unfortunately turn to tribalism when it's taken too far.

What's in a game?

I'm increasingly of the mindset that the word 'replayability' needs to be stricken from the critical lexicon. I was particularly frustrated by its use in relation to *Gone Home*. A quick search online reveals that select journalists and gamers effectively dismissed the game because it was short and revealed the vast majority of its secrets the first time around. But that's what the designers intended: a tightly honed, immersive narrative experience stripped of filler. Like its peers, *Journey*, *Dear Esther* and *Proteus*, it's part of an ongoing paradigm shift, but there seems to be widespread reluctance to accept it.

Gone Home is not above criticism – Ian Bogost articulated his problems with the game while remaining generally favourable – but we shouldn't be trying to force it to conform to outdated standards. We're going to go nowhere fast in terms of both design and criticism if we remain rigid in our language. We've got to the point when our critical capacities need to be much more robust, given the endless variety of 'games' (even that word is proving controversial!) demanding fresh approaches.

In some games, great depths are unravelled through New Game Plus modes. The forthcoming *Dark Souls* and *Bayonetta* sequels seem to be examples of games in which a second playthrough will help illuminate their respective systems in more detail, at least if their predecessors are anything to go by. But when replayability so often refers to frustrating difficulty modes, empty trophy hunting and arbitrary collectibles, I'd suggest in many cases the urge to provide additional value and lasting appeal actively makes games worse.

Games are held to some bizarre standard where if they don't convince a certain vocal subset of gamers to hit the New Game option immediately after the credits roll, they will be vocally crucified. Imagine how absurd the same criticisms would be if applied to film or literature. Games are very often reviewed, discussed and ultimately consumed like mere products – something that needs to provide the maximum amount of content before being disposed of for the next upgrade. That's no way to approach a cultural work like a videogame, that's the way to approach a washing machine (not to denigrate the artistry of washing machine designers and technicians).
Stephen McNeice

Given the high cost of entry compared to films or literature, it's not surprising that people seek maximum value from their investment, but you're right: measuring worth by replay value alone is foolish.

Skip a bit, brother

It was heartening to read in **E**259's *Grand Theft Auto V* review that Rockstar has finally introduced a mission-skip function. I confess that while I devoured *Vice City*, *San Andreas* never reached its rightful climax due to a series of difficulty spikes. The lack of any achievements to spur me on may have been partly to blame, but if that were the sole reason, I'd have gone further in *GTAIV* than I managed to. Not having played Volition's first two *Saints Row* titles, I can't vouch for their challenge. But in the case of the gleefully silly third and fourth instalments, the difficulty level can be changed without penalty. If only all games were prepared to bend their rules for the sake of the player, rather than, in the case of *Mass Effect*, forcing them to plough through Insanity difficulty for an achievement.
Ian Thompson

GTAV is a much more accessible game than its predecessors all round, but its eagerness to pull players through its main campaign is a little unexpected when you consider the vast number of distractions it offers. Having cake and eating it, too? We're in.

Open world or open season?

On the evidence of people who've stuck

their head above the parapet so far by raising any issues at all with *GTAV*, it's becoming more and more difficult to even talk about the game without being accused of being a killjoy. But I thought that **Edge** would at least make reference to some of the more controversial aspects of the game, rather than brushing them aside with the all-encompassing defence, "We are all despicable people," which apparently gives Rockstar carte blanche.

So this time round it's still fine to treat women as objects of derision, but next time it might be particular minority groups – via a homophobic character, or a racist one – and the question is, where does it stop?

Saying everyone is fair game completely misses the point that certain groups in society are subject to the threat of violence on a daily basis in their lives because of particular attributes they might or might not possess. And however many times it becomes normalised, there's still something that feels wildly uncomfortable about acting out violence for entertainment against lazily stereotyped digital representations of some of these groups. Either anything genuinely goes, or there is a line to be drawn, in which case there is room for discussion.

"Either anything goes, or there is a line to be drawn, in which case there's room for discussion"

I'm not interested in the game being banned. The outraged Daily Mail brigade contributes nothing to the discussion and completely bypasses the sheer beautiful joy that you can still get from the scale and freedom of a game like *GTAV*, and the sense of absorption which no other form of media carries off as confidently. But if we can't even have a serious discussion around the moral issues without resorting to brush-offs or, worse still, personal vitriol (not in the pages of **Edge**, I hasten to add), it's going to lead the format down a blind alley and cut off a whole section of the population, whose alienation will only become entrenched.
Mark Whitfield

Which is the real concern, the violence you carry out in *GTA* or the strength of the characterisation of the people against whom the violence is directed? There is a discussion to be had, but there's little sense in searching for morality in Rockstar's amoral playground. At least the new PS Vita coming your way plays host to plenty of games with moral leanings that are more clearly cut.

Moral compass

Quite a few years ago now, online games such as *Battlefield 2* started to track stats, allowing players to examine their actions in microscopic detail after a match. In the context of those games, this was a great way of building a community and keeping players involved when they were away from the game. And it was harmless: no one but the player could possibly be very interested.

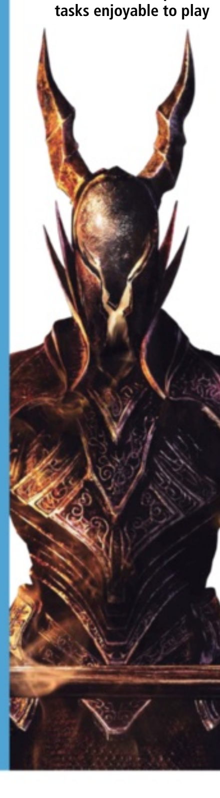
Fast forward to today and the trend continues, but now it's beginning to concern me. *GTAV* is a case in point. The game tracks stats online in great detail, such as favourite radio stations (Non Stop Pop: the shame!). However, it also tracks stats that could be embarrassing: number of innocents killed, strip club visits and so on. This is a very different scenario, because the player is given freedom to choose how to behave in a large open world and these choices reflect the player's personality.

As games move into the next generation and offer increased freedom for a spectrum of behaviour, do we really want our every action tracked and indexed on the Internet? Given the well-publicised hacks of many online services, we can't trust that this information will always stay private.

The thought of being tracked in this way alarms me, almost enough to make me behave like a civilised human when gaming.
Chris Tomkins

Videogames excel at offering opportunities for escapism, so it's hardly reasonable to judge a player's activities as being representative of their personality. However, we agree that there's room for misinterpretation when such stats are taken out of context. Privacy concerns are increasingly relevant as companies create more tools to harvest more information about what we play and how we do so. ■

Stephen McNeice questions the merits of replayability outside of games such as *Dark Souls*, which works hard to make even repeated tasks enjoyable to play



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Xbox One/PS4's multimedia potential
It is great for TV. Oh boy do I love watching TV on my GAMING device. Not having a keyboard makes browsing the Internet awesome too. The programme I am watching doesn't ever take over voice commands and shut itself down either.
Erik Palumbo

You know what I'm really excited by? Using the DualShock touch pad in menus.
Michael Bridgett

Fable II's dog
I sacrificed mine to save the people. The worst decision in my entire gaming career, besides starting with *Fable III*.
Tim Klim Bim

The best dog in videogames!
Mateus Melo Massa

Dogmeat was worth ten of that crowd-pleasing mutt.
Roy Ward



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STEVEN POOLE

Trigger Happy

Touchscreen violence is still relatively new, but why are developers wary of exploiting its full potential?

This month I have mainly been shooting vast quantities of men in the face. That would make it a perfectly ordinary month were it not for the fact that I've been doing so on two portable electronic devices that a decade ago would have seemed like futuristic sci-fi mockups for a high-budget movie. The contrast between the two games is instructive – the one that is a really good face-shooter, *Killzone: Mercenary* on Vita, is a summing-up of the past, while the one that's less satisfying, *Call Of Duty: Strike Team* on iPad, has more to say about the future.

Killzone is the kind of gorgeously polished extrusion of the military-entertainment complex that might well have been the system-selling grail if it had been available for Vita's launch. But it's a standard twin-stick FPS with a few uses of the touchscreen, mainly to make up for not having enough shoulder buttons. And most observers would be surprised if – Nvidia Shield aside – this weren't the last generation of mainstream dedicated handheld videogame consoles. (That is, unless Nintendo pursues its current fascinating strategy to its logical conclusion, following the 2DS with a 1DS; its games would be exclusively one-dimensional, taking place along lines of zero width.)

The future of handheld videogames is surely on phones and tablets, which is why *Call Of Duty: Strike Team* seems more relevant to the form's continuing evolution. It fails to solve the well-known problems of a stick- and mouseless FPS, but it is still intriguing for what it implies about the nascent digital grammar of touchscreen murdering.

An early cutscene in *Strike Team* sees one of your soldiers casually stabbing a rogue physicist through the hand, pinning it to the desk with his combat knife in order to get the grumpy scientist to talk. It's the kind of blithely casual torture beat that has long been a *COD* staple. But this is only in a cutscene. The stealth stabbings in the game proper are accomplished as in any console game: by pressing an action button. Yet here we are on a touchscreen tablet, where creators are constantly looking for innovative applications of gestures. There's an obvious option they are eschewing.

Why not let the player swipe a knife across an enemy's exposed throat, guiding the blade all the way through its fatal motion, perhaps with some tasteful blood spatter on the lens of the virtual camera? It seems like a perfectly iPad-ish way to accomplish virtual wetwork. Yet *Strike Team* comes over all coy in this respect. Nor did the makers of *Killzone: Mercenary* offer such a gruesome control option, though they came closer before turning back: melee kills are accomplished by touchscreen swiping, but only in a QTE way (swipe-follow the big arrow that overlays your enemy).

I'm quite sure creators have thought about this and decided that such an option would be too disgusting. The valuable intimacy of touchscreen control (so well exploited in *The Room*) would become a horrifying intimacy if we were slicing into enemy flesh. Swiping across glass to open a fictional jugular would still be an example of the potent amplification of input, but there would also be a powerful emotional dissonance between the player's physical action of stroking (a sensuous, exploratory touch) and the violent result. So developers fall back to virtual buttons or shape-matching. Personally, I don't blame them. But it shows that we are in an interesting ethical-aesthetic moment. The touch-control paradigm evidently could enable a new golden age of interactive torture porn, yet everyone seems to have tacitly agreed that to pursue such a route would be wrong.

> The touch-control paradigm evidently could enable a golden age of interactive torture porn

But the USP of *Strike Team* is that the enemy doesn't even have to be in your face in the first place. Switch to drone view and you get a top-down RTS perspective. Not only is the game more fun and tactically interesting to play this way, but the vantage point is enjoyably aestheticising: suddenly my finger strokes are causing delightful blue or red pathmarkers to shine forth from my toy soldiers. I am a drone-riding deity, and my fingertip emits a spark of electricity that causes human beings far below to become animated and conform absolutely to my will.

This is a far more serene application of touch controls, even though the result is still brutal death. Just as a modern UAV would have seemed like a thunderbolt-dealing Thor if transplanted to premodern times, the drone view of *Strike Team* turns the player into a god whose invisible touch is law. That's a less intense expression of superiority than slashing a soldier's throat, but a more satisfying vista of absolute power.

What *Strike Team* teaches us by implication, then, is this: an increased level of mimetic parallelism between touchscreen controls and close-quarters gore-splattering seems unacceptable. So, surprisingly, the future of portable warmongering might end up being more like its 2D past and about the cerebral general directing operations from afar. If that means another *Advance Wars* some day, I won't complain.

Steven Poole's Trigger Happy 2.0 is now available from Amazon. Visit him online at www.stevenpoole.net



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LEIGH ALEXANDER

Level Head

Games often feature theatrics, but there are more lessons we can learn from the stage than merely cribbing character tips

Theatre, not journalism, is what I went to school for. When I'm asked about my background and I share that bit, often the question that follows is, 'Then how did you get into games?' It's usually accompanied by a quizzical expression, as if the questioner sees a strange gap between performing on stage in elaborate bustles and running a fictional character through a virtual environment.

I wouldn't be the first to argue that a certain juxtaposition exists between games and performance art – the most evident bit is the fact that in many games you inhabit a character. That character is the part you're given. Essential to acting is the idea that every character in a play has an objective: something they want, a desire, purpose or goal. And just as with games, this overarching objective can be broken into many smaller ones. Just as your player character needs to defeat enemies or discover a key before he can exit a level, Hamlet needs to find out who murdered his father and discover, through conversations, whether or not he can trust his friends before he can have his revenge.

In each of Hamlet's scenes, he may have a more immediate goal that forms a component on the path to his larger objective, or that may even conflict with it. Performances thrive on the actor's playing off of goals and conflicts, and anyone who's ever run a tabletop RPG campaign has probably experienced how this can apply to games.

Actors are also taught to combine their own personal instincts and behaviours with their understanding of the script, and a good performer balances trust in their own naturalistic urges when they inhabit a scene with a committed read of the character's objectives as the text asks. That fascinating creative tension is part of what makes one cast's treatment of a script so different to another's, even if they use the same lines and stage directions.

When this tension doesn't work in games, we call it ludonarrative dissonance, as in the tasks that the player needs to perform don't make sense in the context of the story. Why would a peaceful hero be willing to kill hundreds of people while making wisecracks, for example? Or if the player relates to some aspect of a character – a curiosity to explore the world, or a desire to break things maybe – and the game doesn't allow it, their relationship with the character they're playing can be interrupted.

> Even games that don't have characters at all, or 'stories', can be influenced by theatre

That the player needs to be able to pursue objectives that support, rather than deny, the established characterisation is an important lesson games can take from theatre. But even games that don't have characters in at all, or 'stories' per se, can be influenced by aspects of theatre. Perhaps there's a narrator or chorus in the form of HUD text or voiceover, or perhaps thoughtful use of music helps the designer ensure that the player experiences the desired emotional commitment.

Recent developments in participatory theatre blur the lines even further. I recently went to the Betrayers' Banquet, where diners played a version of the prisoner's dilemma with one another, betraying fellow guests for better food amid the showmanship of candles, fog and hooded staff. London's HintHunt invites you to be locked in a single room with all your friends, tasked with solving puzzles to escape. And the environmental exploration elements of Punchdrunk's Sleep No More theatre have clearly influenced contemporaries such as *Gone Home*.

Games that are designed for an audience are becoming increasingly relevant and popular in an age where much of the media we connect to online is participatory or oriented around sharing. Game streaming services have become a significant part of our experience – for instance, publisher Take-Two Interactive just put a $20 million investment into Twitch.tv, and most of my friends and colleagues these days have at least tried their hand at making a daily *Spelunky* video.

Games such as *LittleBigPlanet* and *Minecraft* have traded successfully for years on the idea that people want to make things in games and share them, but this new degree of participation now proves that's not all we want –we want to give performances and show them to an audience of potentially millions.

Some games are designed specifically with not just players, but viewership in mind – people tune in to watch championships of *Dota 2*, *League Of Legends* and *StarCraft II* the way they would professional sports, and many indie games are designed for installations, gallery shows and big screens, where people gather to watch or join in.

Ramiro Corbetta's *Hokra* intentionally incorporates visual and design elements that are designed to make the game fun not just for players, but for viewers. The centrepiece of this year's GameCity event involved games designed around two enormous screens to be displayed in Nottingham's public square to attract onlookers and players alike. When you look at that kind of installation as a natural evolution of public theatre, things get interesting for games, promising that designed interaction will become a cultural touchstone and an ever less insular form.

Leigh Alexander is a widely published writer on the business, design and culture of videogames and social media



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BRIAN HOWE

You're Playing It Wrong

While eSports' athletic ties are laughable, the injuries professional players have sustained are anything but

At first the competitive gaming landscape was a small and desolate place, sparsely populated by furtive men with facial expressions that screamed 'severe sleep apnoea'. But as gaming grew into the mainstream, so did gaming contests. Over time, breadcrumb trails of triple initials and the secluded acclaim of Twin Galaxies leaderboards gave way to global tournaments and online rankings as players' proving grounds of choice. As prize money and sponsorships mounted and the major global tourney organisations firmed up, the term 'competitive gaming' inflated to the loftier but still accurate 'professional gaming'. Some lost souls even tried to force the abominable term 'cybersport' into circulation, seemingly unaware that it was slang for letting a robot pee on you in an arousing fashion.

Only recently has competitive gaming become bold enough to openly brand itself as a sport, even though videogames are generally considered to make you bad at sports. As such, the buzzword 'eSports' immediately presents some logical issues. For instance, if strategy gamers can be called athletes, then are sports gamers some kind of, like, metaphysical double athletes, combining the physical abilities of Bo Jackson with the uncanny twitch reflexes of Bo Jackson's iron-deficient ghost? After all, the only physical attribute gaming develops, beyond the grotesquely developed flailing muscles that come from the excessive use of motion controls, is fine motor control. Should we make model ship building a sport as well? And while an athlete performing at top capacity models an ideal we can all aspire to, it's hard to say the same about some gourd-shaped ghoul twitching dementedly and shouting curses in the pale glow of *Call Of Duty*. If competing and getting paid are the only qualifications for sport, should reality TV contestants win Olympic medals?

Having established that competitive gaming has the same relation to sports that an electronic cigarette has to hand-rolled tobacco, let it be said that eSports does not lack for serious, even fatal, consequences – though, unlike in real sports, they're more often psychological in nature. With that in mind, let's run down the three worst eInjuries of all time as gruesomely as we can. We're sorry for not including any women on the list, but the fact remains that the participants and audiences of eSports are 110 per cent male, minus 40 per cent female, and 30 per cent eunuch.

> Pro gaming has the same relation to sports that an e-cigarette has to hand-rolled tobacco

First is Oleg Luchenko, eviscerated on the Gyeongbu Expressway. Luchenko, a veteran of turn-based strategy games, was the first eAthlete to meet his ultimate game over. While training for a *Total War* tournament at the World Cyber Games in Seoul, he lost his grip on reality and fell under the delusion that he could freeze time while making his decisions in daily life. After badly holding up the line at a food mart, weighing the healing powers of meat against the magic-restoring properties of green tea, he started a conversation with a pretty woman and was startled when she walked off after he abruptly fell silent to ponder whether to ask for her number or mine her for resources. Finally, he got lost while driving to the tournament centre, skidded to a stop at a busy intersection and caused a 12-car pileup that sheared his body into 12 rhombuses of charred goo. We hate to show you this, but here's a graphic image as recreated by our digital artists.

Dexter Milkwhistle, meanwhile, broke his neck in a botched impersonation. Pumped up by his sweeping victory in *Tekken Tag Tournament* at the Pentium Evolution Worldwide Cyber Championship, Milkwhistle, a rail-thin stamp collector with asthma, confronted a gang of hoods who were hassling an elderly lady on the streets of Chicago. After attempting a backward somersault kick in the manner of his winning character, Paul, he naturally failed, landing facedown onto a storm drain, which popped off his head like a bottle opener popping off a cap. This all transpired to the horror of the hoods, who, in a tragic twist, turned out to be volunteers canvassing for Greenpeace. This isn't something anyone should have to see, but here's a 3D recreation based on computer models of the scene.

Finally, there's the case of Xavier Baggins, who ate his own liver with Marmite. Baggins, the world champion of *Halo*, was not only the most famous person to perish in the riot at the 2013 Lynx Body Douche Cyber Masters Of The Universe Evolved Tournament, he also suffered the most grotesque fate. Witnesses of the live broadcast will remember the carnage that ensued when a woman happened to pass by the New York hotel conference room where the tourney was in process. This upset the gathered fraggers' delicate social order so badly that dozens of contestants were killed in a mass hysteria of angry kissing and affectionate stabbing, while the champion sat laughing hysterically atop a Warthog recreation as he consumed his own liver with Marmite. While this assault on dignity is best forgotten, here's a series of enhanced screengrabs from the live feed with glib reader annotations.

Brian Howe writes about books, games and more for a variety of publications, including Pitchfork and Kill Screen


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H Y P E

THE GAMES IN OUR SIGHTS THIS MONTH



Explore the iPad edition of **Edge** for extra Hype content

Playing to the crowd



The rise of crowdfunding and paid alphas has promoted players to designers, giving them the power to guide the hands of those creating the games in which they have invested. This ceding of authorship introduces its own problems – not least a wearisome sense of entitlement – but it can also lay claim to being the catalyst for a level of audience engagement that has no equivalent outside of videogames. So it's hardly surprising to see authorial control being handed to players by studios of all sizes.

Team Dakota is currently avoiding all talk of a traditional singleplayer quest in game creator *Project Spark* (p44). Instead, it wants to provide players with all the tools they need to make their own games, and for those creations to remain front and centre – so much so that it's working on a way to ensure creators are credited for their work no matter how many times their contributions are tweaked. Meanwhile, *Thomas Was Alone* developer Mike Bithell is working on a system that will allow the singleplayer campaign he has designed for stealth game *Volume* (p56) to be superseded by player-remixed versions made in a flexible in-game editor. If someone tweaks the game's difficulty to make things easier and that iteration becomes popular, Bithell wants to allow it to become the defining version of the game for some players.

It's a strikingly different approach to the one that underpins *The Order: 1886* (p50), which will take players on a carefully orchestrated journey through Ready At Dawn's volumetrically lit vision of 19th-century London. This is a studio moving from PSP to PS4, and from using characters such as Daxter and Kratos to creating a new IP, plus the game runs on a next-gen engine that's all its own. Involving players in the development process would likely be a step too far. While players may be more involved in game creation than ever before, there's something to be said for a strict level of authorial control. The industry's richer for supporting both approaches.

MOST WANTED

Super Time Force 360
The wait continues for Capy's time-bending shooter. Balancing a game in which death is an opportunity instead of a setback must be quite the headache, but the longer the wait, the more we suspect that it, like its stablemate *Below*, is heading to Xbox One.

The Walking Dead: Season Two 360, PC, PS3
Telltale's silence had us wondering whether this had slipped, but *Season Two* kicks off before the year is out. We'll admit concern at controlling Clem this time, but *Season One* has earned Telltale the benefit of the doubt.

Mario Kart 8 Wii U
With *Super Mario 3D World* conquered, our thoughts naturally turn to Wii U's next mooted system-seller. With *3D World* aimed squarely at seasoned players, not Nintendo's departed expanded audience, we're optimistic that this will be more *Mario Kart 7* than *Mario Kart Wii*.



PROJECT SPARK

Bolster Xbox One's launch-window lineup by making your own games

Publisher Microsoft
Developer Team Dakota
Format 360, PC, Xbox One
Origin US
Release TBA

The first hurdle any creative endeavour faces is the blank canvas. Even if you manage to overcome that obstacle, it takes time to make something new, and when videogame store shelves are full of deep, open-world adventures, a player's time is a valuable resource indeed. But game-creation sandbox *Project Spark* differs from the current big names in user-generated content – *Trials Evolution*, *LittleBigPlanet* and *Minecraft* – in that it doesn't simply want to provide you with tools with which to be creative. Instead, it wants to inspire you.

Team Dakota's labelling of *Project Spark* as an "open-world digital canvas" is awkward, yet the game itself seems anything but. It's already proving a success among an alpha testbed of thousands of players, resulting in such varied output as animated velociraptor models, comedy Star Wars machinima, and even fully fledged RPGs.

"It always struck me that it was unfair that I got to work on games, but everyone else didn't," says Team Dakota studio manager and executive producer **Michael Saxs Persson**. He's spent two decades in the industry, which has included stints at Double Helix and Microsoft Studios. "The feeling of making something is just amazing. So we wanted to make a game about creation, not just a game where you happen to be able to make a level."

Project Spark's goblins are wonderfully animated and a source of many laughs. You can program them to help or hinder players, or just to dance in a conga line



As blank canvasses go, *Project Spark* presents perhaps gaming's most dauntingly massive one yet. Its voxel-based worlds can stretch to around five square kilometres, and encompass vast heights and depths. And if that's not enough room to hold your ideas, you can link to as many other areas as you want, with a virtual property bag allowing you to bring various items with you between worlds. To put each world's size into context, everything that Team Dakota showed at E3 was crammed into the game's earlier 300x200m boundaries.

Alongside community support, the game has three other crutches for new players, the first of which is classic tutorials. Rather than teach you the use of a particular type of paintbrush, however, they guide you through the broad selection of tools on offer within the context of making a game. They should get you up to speed with *Project Spark*'s lingo, too, so you'll learn that every object from the humble rock to the mighty velociraptor has a modifiable 'brain' that dictates how it acts. The tutorials are the functional equivalent of learning a new language by understanding key phrases and the underlying grammar, rather than trying to memorise every word.

Assemblies, meanwhile, are collected objects or behaviours that will function both



Details haven't been revealed yet, but *Project Spark* has its own lore and backstory based around the fantasy look that's become its signature aesthetic. Team Dakota hasn't ruled out a singleplayer quest either





ABOVE **Persson on *Spark*'s multiscreen experience: "We're not leading the charge, we're just designed from the ground up to take advantage of it. I think there's a big difference there. We're made for this."** RIGHT **The game features three preset biomes. While more are planned, it's entirely possible to create your own ad-hoc solutions**







as shortcuts and as a way for players who aren't yet ready to tinker with AI or health bars to add mechanics to their creations. "An assembly could just be a brain to put in a character that [makes it exhibit] avoidance or flocking behaviour," Persson explains, "or it could be a house glued together from ten different pieces with particle effects already attached and a working door."

Team Dakota will also provide a selection of its own assemblies for players to reverse

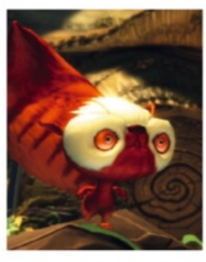
> ***You'll design everything in the game, right down to what the hero is wearing***

engineer. A locked door with matching red keycard, for example, can be quickly repurposed into one that works with a yellow or blue keycard. And in the process of doing so, Persson hopes, you'll gain some insight into how it was built in the first place.

Player and enemy characters can be constructed in the same manner, scaling and clipping together objects to make custom shapes. One level we see features a *Shadow Of The Colossus*-like sand snake, fins protruding along its length and a fire breathing skull at the front. The body is simply a rubber ball with bone fragments attached, which is then duplicated by the object's brain to give the illusion of one long cylindrical body.

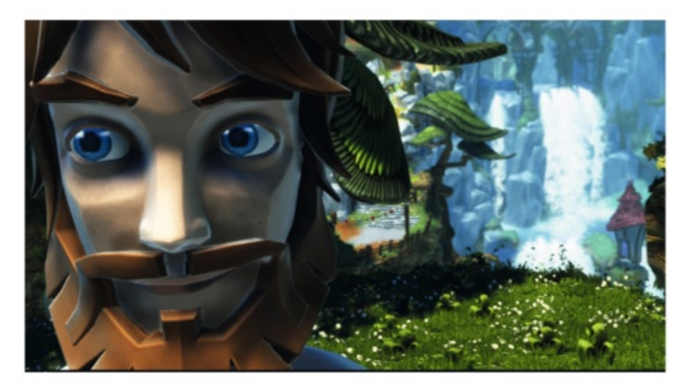
Finally, *Project Spark* offers a mode called Crossroads, which is the choose-your-own adventure process applied to game making. Each step of the creation process is distilled into three choices. Do you want mountains, tundra or forest? Will your game be about resource gathering, protecting a village or hunting down a boss? You'll design everything in the game, right down to what the hero is wearing and whether or not there are any cutscenes, but will be freed of more complex concerns, such as designing logic. At the end of the process, you can choose to publish the result or use it to provide a jumping-off point for more tinkering. While Crossroads might focus your creativity, Team Dakota doesn't want to curtail it, and so the system will evolve along with the game as new modes, characters and assets are added over time.

That the studio has thought so much about getting players up to speed with *Project Spark*'s potential says much for the game's versatility. Sculpting landscapes is made manageable with a selection of scalable brush tools that produce hills, cliffs, plateaus and

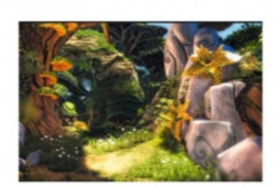


Playing it forward

Team Dakota wants players to collaborate, which is why it is working on a system known as 'lineage'. "What we've seen in the wild is that some people are really good at brains, some people are really good at making things pretty, some people are really funny," Persson explains. "And when those three people make something together, it's way better than anything they could have made themselves." The team is still working on the best way to implement lineage, but in simple terms it's about maintaining credit for your contributions to a project no matter how many iterations of it have been made.









TOP **"Our ambition is that, whether we push for it or not, *Spark* is going to end up in classrooms," says Persson. "We're pretty sure it will from the reaction we've seen from teachers and universities."**
ABOVE ***Project Spark*'s landscaping tools allow players to create strikingly busy, organic-looking environments quickly and easy. Fine control is entirely possible, but the game encourages you to let loose and see what happens**







TOP **There's a touch of *Fable* about *Project Spark*'s base character models. Each is highly customisable and you can even build your own from scratch by bolting props onto a skeleton.**
ABOVE **So far, three biomes have been shown: woodland, desert and tundra. Even with just these three aesthetics, the alpha community has produced a *Geometry Wars*-style shooter and a homage to the monochrome *Limbo*.**
RIGHT ***Project Spark*'s E3 showing demonstrated only a fraction of its potential. The complexity of the brains system should allow for almost any gametype**





caves in short order. Switching to the biome brush will allow you to quickly carpet an area in lush forest or shards of ice, but if you have the time then you can also choose to layer brushes and build up your world in a more granular fashion.

Props such as houses and rocks can be rotated, scaled, placed individually or clumped together to produce even more complex shapes. You can keep adding particle effects, light sources and other effects to the world until you hit the buffer limits, which are telegraphed by a set of sliders that make themselves apparent when you're nearing a maximum. The team is still optimising and learning what's possible, but Persson assures us that those limits are extremely generous – it's unlikely that you'll clatter into a ceiling with anywhere near the regularity that ambitious *LittleBigPlanet* creators do.

Second-screen experiences remain a divisive addition to gaming's future, but Team Dakota has built a multiscreen experience from the ground up. "When we saw SmartGlass, we weren't thinking, 'Let's have a companion website to help me on the tutorials while I'm using the console,'" says Persson. "We thought, 'We have a touch input; now you can have all the power of Xbox One on your tablet, and switch between touch and controllers to [make] your creation.'"

It's an appealing prospect, enabling the kind of free sketching that just isn't possible with an analogue stick. And you can use mouse and keyboard, too, or even dip in via your 360. No matter which version of *Project Spark* you have, or how many inputs, you'll have access to the same core toolset. There's also Kinect functionality, which will allow you to switch between brushes and modes using voice commands, and act out your own cutscenes using facial and full-body capture.

But while the landscaping and narrative tools are noteworthy, it's the potential inherent in the game's brains that's really exciting. Based on the team's own *Kodu Game Lab*, an education-focused visual programming language, brains enable you to imbue objects with complex logic or AI by combining simple When and Do instructions. By mixing together both, you can, for instance, make a door that plays a sound but stays locked when players try to open it, unless it detects they have the appropriate key. You can nest commands, too, and split your instructions across multiple pages, which makes room for some incredibly complex sets of instructions.

Persson is excited at the prospect of players' creations, but he stresses that making a fully fledged game needn't be the only route you can take. "Making games is certainly important, but that's only part of what we see people doing," he says. "Lots of people love to just fool around. [They] simply sculpt, make stuff, put random brains [into objects] and see what happens, with no particular purpose other than having fun. And we see that from all ages. Our goal is as much about you having fun in the moment as it about you making that jewel that you want to put up in the community and share because it's perfect."

> ***"Making games is certainly important, but that's only part of what we see people doing"***

Persson doesn't look at *Project Spark* as a game, but more of a play system along the same lines as Lego. His team, he explains, will provide the first few boxes of bricks for you when the game ships, which you can combine in billions of different ways. And while the team isn't ready to talk about it in detail just yet, *Project Spark*'s multiplayer aspect will tie into that conceit by allowing for ad-hoc drop-in/drop-out sessions.

Community will be at the core of *Project Spark*, whether it's sharing levels, providing assembly solutions or simply broadcasting tutorials or webisodes on Twitch.tv. And in that respect, even disregarding the tech under the bonnet, it is a truly next-gen game. If Team Dakota can effectively balance the system's daunting complexity with broad accessibility, then *Project Spark* could well inspire a new wave of bedroom coders.

"Fundamentally, people love to do stuff together," says Persson. "And they love making stuff. If *Minecraft* has shown us anything, it's that together is better. ■

Q&A
Michael Saxs Persson
Studio manager, Team Dakota



The messaging around *Project Spark* has dwelt on collaboration and creativity. Will there be a singleplayer quest as well?
We haven't announced anything around that yet, but we feel there are lots of stories to be told in the storybook fantasy art direction that we've started out with. There's lore that ties it all together, which is presented as the game boots up. We don't want that to be front and centre, because we want it to be about what people make. That said, can we imagine telling our own stories in this universe? Sure, I think that would be fantastic.

How many brushes and tools will be available on day one?
We're aiming for a fully fledged set of character effects, props and sounds that will allow you to make a game. We haven't said that we need 250 effects or anything like that. We've looked at it from a variety standpoint… What's really important to us is the level of customisation available, not how many shirts we give you. If people just clipped ready-made stuff together and then shipped it as a level, we wouldn't have nearly the amount of interesting stuff that we've seen in the alpha community.

Twitch.tv already has a very active *Project Spark* community…
Every time we do a Twitch, within a few hours there's always at least two recaps of what we did, edited down to ten minutes and with commentary from community members. We see the same in the alpha community – people jumping in and helping with whoever has issues. And on Reddit there's a huge community of people answering questions for us. When people want to be involved, that is a great, great feeling for us.

***Project Spark* places few limitations on players. Was it a challenge building an engine that can handle those demands?**
Occlusion and being efficient with our rendering is a big deal, but it's not the area where we're the most inventive. Most of our innovation is in how we enable you to create, how we help you pick the right brain tiles, how we make the act of sculpting intuitive, how we do the controller mapping so that it feels natural for everybody, [and] how we allow you to remix and decipher what other people have made. We've spent a long time working on usability – way more time than in the rendering.



THE ORDER: 1886

Ready At Dawn's cinematic PS4 debut is coming into focus

Publisher SCEE
Developer Ready At Dawn
Format PS4
Origin US
Release TBC

The attention to detail in characters and weapons makes for delightful preproduction sketches and character renders. Screenshots suggest this hard work is also carrying through into the game



The term 'light as air' takes on new meaning in *The Order: 1886*, a game in which – as you may have gathered from its screenshots – the very air is lit. This lends some credence to the thirdperson shooter's filmic look, bringing to mind movies such as Seven and Blade Runner.

"What is our world really like?" asks Ready At Dawn creative director **Ru Weerasuriya**. "If you look outside, it's not just clear; there's dust in the air, fog, all these things that make this world immersive. We created this light – it's the way they use light on film sets. They have a light source, but because there's so much dust, you feel like the light is glowing through these layers. It's an aura almost, this halo effect. The light has no source so much as this glowing area. It makes it feel really gritty and dirty, and we thrive in the dirtiness of our world. Nothing's clean."

Much is being made of *The Order*'s art and tech, possibly because they read better than its tale of gun-toting knights in an alternative Victorian London battling, well, mutants.

The principals – analogues of key players in Arthurian lore with the titles to match – are certainly a handsome, rugged and finely coiffed bunch; the next-gen hair race is proving quick off the blocks. Look at them, though, moving into and out of banter range as the action ebbs and flows, and you have to wonder how much *Gears Of War* continues to drive the genre.

Weerasuriya quickly assures us that "rather than just making a thirdperson game, we took it upon ourselves to figure out why we like them. Not everybody likes thirdperson shooters for the same exact reason, so we tried to figure out what the core elements were [that] we wanted to keep, and also add that element of what we've done in the past – for example, melee.

"Shooters have a tendency to be very light or canned on melee. We wanted to find new ways of introducing it that would keep you feeling you were in a shooter that's evolved into something else, rather than been segmented. It started with us trying to figure out how we balance the two, shooter and melee, but then it evolved into us making this shooter with different melee systems.

"Beyond that, we also tried to make the moment-to-moment gameplay different. We didn't want it to be a grind for 40-45 minutes because you're in shooting mode. Everything in the game happens in little bursts, and that really makes you not dwell too much on one thing that might otherwise bore you."

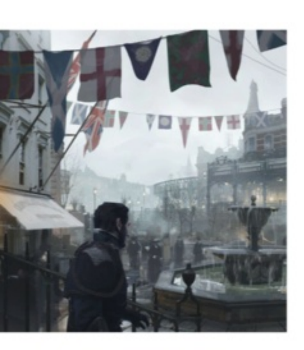
Ready At Dawn has been working with its own tech since its formation in 2003, eschewing PSP middleware for its early



Ru Weerasuriya, CEO and creative director of Ready At Dawn



The knights of *The Order* go by real names and Arthurian aliases. In keeping with the secretive nature of much of the project, what the game will do with its dual identities isn't yet known


A busy and believable world is where *The Order* promises its biggest departure from the Unreal spaces of *Gears Of War* – but just how much can the genre sustain?

creations and making "technology that basically worked on PC from day one," says Weerasuriya. "All of our systems [now] are evolutions of the systems we built back then. The big idea was that we needed to have control over something to make a showpiece game on PS4. Relying on external technology would mean that we'd have to rely on somebody else fixing our issues for us. We can't take that risk with something this big."

And this has allowed the studio to pursue incredibly dynamic camerawork in its story-driven PS4 debut. "The game itself is from your point of view, of course, but even that changes according to what you do. Things that we did on *God Of War* [on PSP] showed that you can use that camera to do really interesting things. Here, seamlessly as you're playing the game, we might be able to take over the camera and show you something, or even cut the camera outside to a scene that's

> ***"There's no difference between cinematic and in-game. All the cinematics are realtime"***

happening in front of you so, just like in a movie, you're seeing your character approach."

Following the filmic trend to its natural conclusion, there will be no bumps between presentation styles. "[For] practically every single thing you see in the game, there's no difference between cinematic and in-game. All the cinematics are realtime; you'll get back into the game and everything you saw in the cinematic will be there."

The Order is also the studio's first original IP, which Weerasuriya admits makes it harder for his team to hit development milestones. "That is [the] reality of new IPs: there are no guarantees. You start with all the goodwill in the world and you want to fly to the sun. The reality is that we needed to find, in this partnership with Sony, an understanding they already have, because they do this so many times with so many new IPs, with some of their best teams. So, yeah, it's harder to evaluate what you're going to hit at a certain time. Some things might take less time, [but] most things take more."

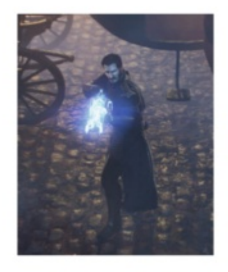

The visual dressing of *The Order*'s weaponry is archaic, but the firearms' functions are anything but. One gun can blast enemies back with a shockwave, while the Thermite rifle creates a deadly flaming cloud

In the absence of any publicly shown gameplay, *The Order* has fed hearty dollops of backstory to its followers since E3, leaving us rather full. Is another risk of new IP that you can simply write too much? "That's a huge risk," Weerasuriya tells us. "As a matter of fact, with the first draft of the story, I had too many things. I was going all over the place. But at the same time, it helped the team realise the origins [and] the foundations of each of these characters. Do I need to write all of this, put it on paper? Absolutely. We put everything on paper. I have documents and documents of all the stuff that precedes the game. But you're just going to get what you need in the game. That's it. You won't know 90 per cent of the person even by the end."

Perhaps the most exciting character shown so far appears in the form of Ready At Dawn's fog-covered take on 1886 London. Weerasuriya explains how everyone on the team submits dailies to show what they've been working on, "and sometimes the guys working on a level might take the liberty of making their screenshot look like a picture. We still have a few things to solve, but the way the material system and lighting system work means we've been able to achieve some looks that are almost like artwork."

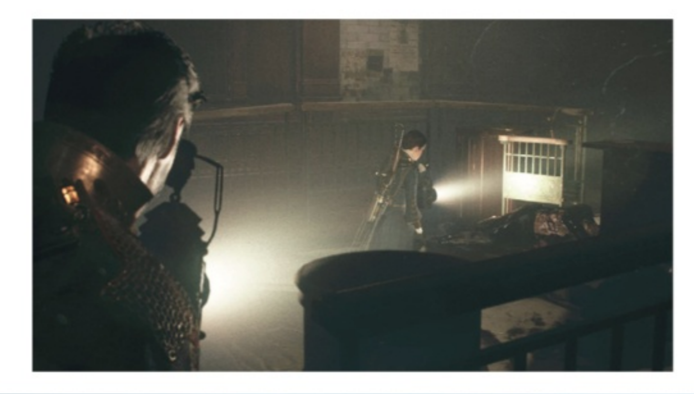
Promising an eclectic-yet-believable world that marries his childhood familiarity with the city of London to his US team's more grandiose impressions, Weerasuriya hopes the "internal fight going on about what's right about London will capture the best of both worlds". Based on what we've seen so far, it's paying off. Cinemascope street scenes thick with atmosphere and passers-by are the strongest indication that this is not your average shooter, the lighting so cinematic that it's hard to foresee anything looking dull except for the weather.

Is the city explorable, then? Can we investigate its murky alleyways at will? "That's always the struggle," Weerasuriya says. "I love to explore the environment so long as it gives you something back. Yes, we're trying to do some of that, but the reality is that it's a singleplayer game that takes you on a ride, and we don't want to compromise that ride." ■



A whole wide world

The Order: 1886 is presented in a 2.4:1 Cinemascope ratio, but is it really necessary, or necessarily filmic? It's about pacing, Weerasuriya says. "When we started discussing the whole integration of cinematics into gameplay, you'll see from the gameplay itself that moment-to-moment gameplay goes often from a core game-centric mechanic to a small moment of character development that might only take a few seconds. One of our doctrines at the beginning was to emulate a little bit of what people were used to seeing with movies. That made the decision: we're going 2.4:1 and that's it."



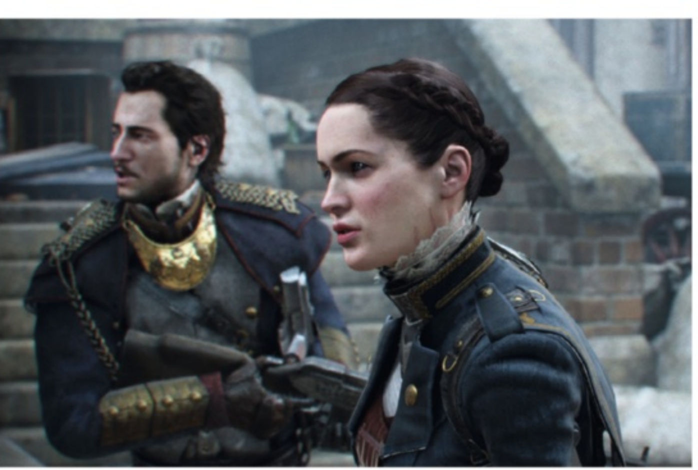






TOP Even the pictures on the walls are in Cinemascope. This game is seriously wide. We wonder if it will justify a growing and potentially irritating next-gen trend. TOP LEFT While shades of *Condemned: Criminal Origins* inhabit the musty interiors, this looks more like a fleeting cutscene than player-assisted forensics. LEFT The game enjoys all the usual benefits of a foggy, overcast setting when it comes to convincing light and shadow, but the sun will come out, we're told, thanks to what Weerasuriya calls "very versatile" lighting tech





LEFT The story, by Weerasuriya with help from John Adams writer Kirk Ellis, promises tension that the characters seem able to deliver, not to mention plenty of in-engine cutscenes







Publisher 17-Bit
Developer In-house
Format PC, PS4
Origin US
Release 2014



GALAK-Z

17-Bit's transformation of the 2D shooter demands a closer look

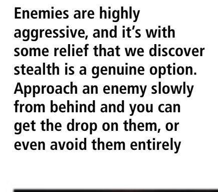
This is only 17-Bit's second game, but already the studio is crafting a signature visual style. *Galak-Z*'s cel-shaded models instantly recall *Skulls Of The Shogun*, which also lends this ship its decal

Jake Kazdal, CEO and creative director of 17-Bit, has an image problem. At first glance, *Galak-Z* is the latest in a long line of indie homages, another earnest love letter to a bygone era of pop and videogame culture. Screenshots portray a game in thrall to arcade shooters and anime. But while Kazdal grew up playing *Asteroids* and *R-Type*, and watching Robotech and Space Battleship Yamato, *Galak-Z* is no mere homage. He acknowledges his influences, but instead of a list of 2D shooters, he speaks of *Far Cry 3*, *Halo* and *GTA*, and of tactical space combat powered by advanced AI and physics. The problem is, you can't sell mechanics with screenshots.

"It's been a very difficult message for us," he says. "This is going to be one of our biggest challenges, especially as we move into the heavy marketing phase – how to sell this. It's not something that you've played before, and it's not what it looks like. People just think it's some twin-stick shooter, and it's not."

It really isn't. Spin the left analogue stick and your craft rotates on the spot. Press Cross and you fire lasers in the direction you're facing. Hold Circle and you can lock on to multiple enemies at once, loosing off a volley of homing missiles when you release the button. Shoulder buttons handle acceleration: R1 for forward thrusters, L1 for reverse and R2 to boost. It takes some getting used to, feeling weighty yet weightless, and you're wrestling not only with twin-stick muscle memory, but your genre expectations. Bump into an asteroid and you don't die; your rechargeable shields will take a bit of damage, and the impact nudges the hunk of rock onto a new course. With so much going on, Kazdal feels, making contact with the scenery fatal would have distracted from the game's true focus.



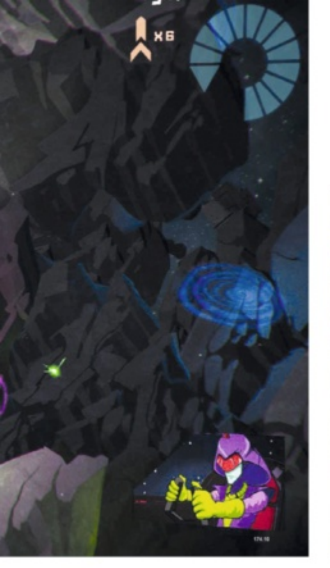


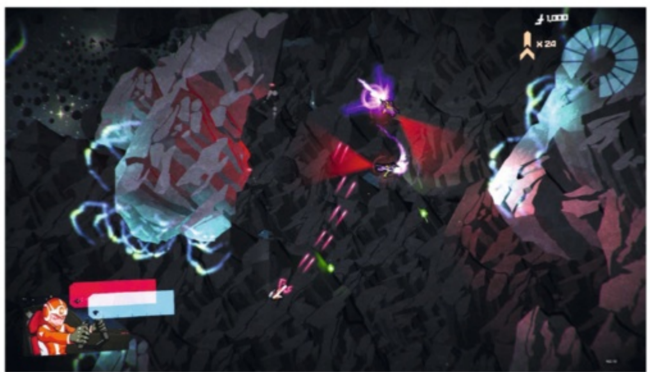
Enemies are highly aggressive, and it's with some relief that we discover stealth is a genuine option. Approach an enemy slowly from behind and you can get the drop on them, or even avoid them entirely



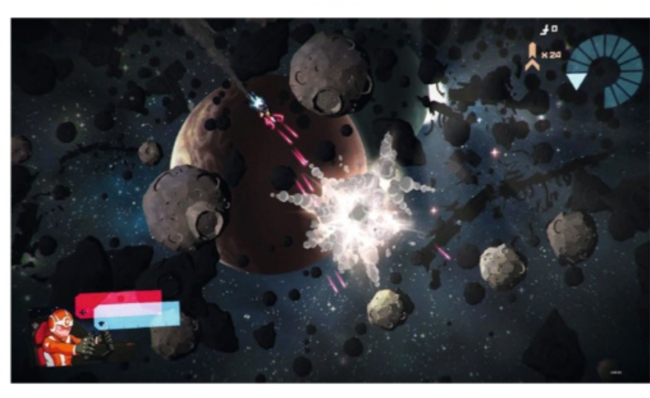
Jake Kazdal, creative director and CEO, 17-Bit







LEFT **Once they've spotted you, enemies' vision cones cease to matter. They'll continue to seek you out unless you can boost away and hide in deep cover**



TOP **Your ship's comms system enables you to overhear enemies' chatter when they draw near. They call for backup, signal when they're retreating, and call for a coordinated attack when your shields are down.** ABOVE ***Galak-Z* subverts your expectations twice in the first 30 seconds, first with its controls, then its scenery. Bump into an asteroid and you don't die; the most serious consequence is the loss of momentum**

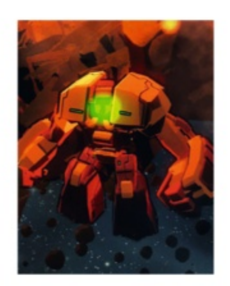
"It's about understanding momentum," he says. "Understanding your curves, leading your shots – it's a 2D dogfighting simulator, and that sort of thing is not something you get out of a twin-stick shooter. I don't like them. I want to understand my timing. I want to understand arcs and stuff, planning my attack and taking cover when my shields are down. It's much more tactical than a twin-stick shooter, which is just guns-blazing craziness. A lot of people have done that."

Enemy intelligence is the key, with Kazdal's 17-Bit studio enlisting the services of Cyntient, a Seattle-based startup working on an AI plug-in. It's here that Kazdal's comparisons to big-budget games begin to hold water. "I'm a huge fan of the adventure shooter, stuff like *Halo* and *Far Cry 3*, which I thought was fantastic. Having these enemies out on these organic patrols, out looking for you with their vision cones, where you can choose to sneak past them or engage… We're putting a lot of effort into the AI."

And it shows. Circle behind an enemy and you can dispatch them before they know what's hit them, but take them head on and things are different. They're incredibly aggressive, chasing after you, calling for backup and communicating, their chatter intercepted by your ship when you're close enough. Knock out an assailant's shields, however, and it will retreat, letting others keep up the pressure while its defences recharge. "We spend a lot of time talking about the dynamics, how characters should react, how much self-preservation they have under different circumstances. These guys will continue to track you. It's not like you can run past an invisible line and they'll stop coming after you. They'll continue to chase as long as they have an idea of where you are. I want this feeling of freshness, of responsibility. You really have to engage. You can't just walk out of the room and restart it."

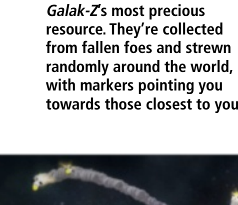
> ***"It's much more tactical than a twin-stick shooter, which is just guns-blazing craziness"***

***Galak-Z*'s PS4 release** is still a year away, and the PC version will follow later, but the game already feels remarkably complete, at least mechanically. Much remains to be done – when we speak, Kazdal and team have just begun work on procedural generation (see 'To infinity and beyond'). Still, *Galak-Z* seems set to do for the 2D shooter what 17-Bit's *Skulls Of The Shogun* did for turn-based strategy: take a beloved genre and bring it up to modern standards. "This is our entire creed," Kazdal says. "I don't want to play any more 8bit, retro-looking platformers. I played enough of those in the '80s. I don't want to play another bullet-hell shooter. I've played a thousand of those. There's no reason you shouldn't take advantage of the modern stuff we have that makes development much faster and easier. We can do so much more now with so much less than was required back then."



To infinity and beyond

Of *Galak-Z*'s two current levels, the first is a self-contained mission. The second is far more open, and it's this latter style that will most benefit from procedural generation. Random scenery and enemies are part of Kazdal's plans for greater post-launch support than *Skulls Of The Shogun* received. "Think of something like *Spelunky*: there are a million different ways to die in that game – all these enemies with slightly different behaviour patterns, props and penalties and dangers," Kazdal explains. "We can just continue to add stuff like that. It's such a fun, organic, dynamic playspace that the more wildcard things we add to that, the more it's going to continue to stay fresh."



Your stock of missiles is *Galak-Z*'s most precious resource. They're collected from fallen foes and strewn randomly around the world, with markers pointing you towards those closest to you





Publisher Mike Bithell
Developer In-house
Format Mac, PC, PS4, Vita
Origin UK
Release TBC



VOLUME

Thomas Was Alone's creator slips into the stealth genre

Mike Bithell's breakout success, *Thomas Was Alone*, might have been a platformer, but the creator has long been concerned about the state of stealth. "I think combat has unbalanced the genre," he tells us. "There's this weird marketing message around stealth games now that you can choose to be violent or covert. That's fine, and I really enjoyed the last *Splinter Cell*, but I don't like the rhetoric; to me, it's a way of making a bad stealth game and a bad shooter."

Volume is an attempt to redress the balance. It's an isometric stealth game in which you'll never fire a gun or snap a neck. Instead, you must sneak past angular robotic guards without being detected. And if you *are* spotted, you'll need to hide sharpish.

"Stealth shouldn't, in my opinion, be about room clearing," Bithell says. "When I play the latest *Metal Gear Solid* or *Splinter Cell* – or *Hitman*, when I'm not playing it properly – I walk into a room with four enemies and it's not about getting through that room sneakily. It's about killing those enemies one by one by walking up behind them. I finish every stealth game with a bag full of awesome gadgets I've never needed to use."

Robert Locksley, *Volume*'s protagonist, will need to lean heavily on his bag of gadgets. Bithell plans to put about ten items at your disposal, but has revealed only four so far. The Bugle can be bounced off walls, its path controlled with the mouse. The left button fires the gadget, and a loud sound is triggered when you release your finger, drawing guards to the device. A blackjack will stun a guard for a few seconds, while Thunderclaps and Veils inhibit hearing and vision cones respectively.

Some guards follow set patrols, while others remain at their posts until disturbed, but you won't be spotted as long as you stay outside of their telegraphed vision cones. Environmental features, such as force fields and noise-generating floor panels, complicate matters. Hold Shift and Locksley will press himself up against the nearest wall. From there, he can move round corners without leaving cover with a tap of Space.

If a guard hears you moving, it will investigate the area, but cupboards and corners offer hiding places, providing you can get to them quickly. Actions such as entering a cupboard, disabling a force field and picking up a gadget trigger a timer bar, which fills gradually unless you move away. While waiting to pick up an item might feel slightly contrived, it delivers undeniable tension. And if a guard catches you getting into a cupboard, he will simply shoot you through the door.

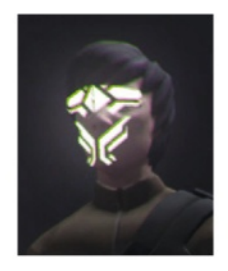
Bithell might be looking to stealth's earlier precepts for the singleplayer, but other areas of the game are more progressive. *Volume* will come with a fully functional, drag-and-drop level editor, which will go beyond just sharing new maps. "I'd very much like to facilitate people being able to modify and then share their modification of the core game," he says. "So if you get the game and decide that it's way too hard, you can go into the editor and change the way all of those core story levels work, and distribute that to anyone who's bought the game. And that can become the defining version of the game for those people."

If a guard catches you getting into a cupboard, he'll simply shoot you through the door

It's a self-effacing attitude towards development from a man who's as well known as his creations. But Bithell's real hope for the editor is that it will provide a high level of customisation for players who wouldn't normally download a mod. There's still some way to go before that vision is realised, and the editor is currently far from user friendly, but *Volume*'s restrained ingredients are already showing a great deal of promise for those who prefer to stay under the radar.



Indie developer and *Thomas Was Alone* creator Mike Bithell



Crimewatch

Volume is a near-future retelling of the Robin Hood legend, starring a precocious young activist who happens to share a name with Robert of Locksley. After finding a military training tool called The Volume, which was originally designed for training soldiers, Locksley uses it to become what Bithell describes as a "crime Let's Play-er". By using the titular VR device to build digital approximations of rich people's homes, Locksley demonstrates how to steal from them and streams his actions over the Internet. Danny Wallace returns following his BAFTA-winning turn as *Thomas Was Alone*'s narrator, this time playing The Volume's AI. An intelligence designed by gun nuts, it tries to help in the only way it knows how, but gradually learns that killing people isn't the only way for humans to solve problems.

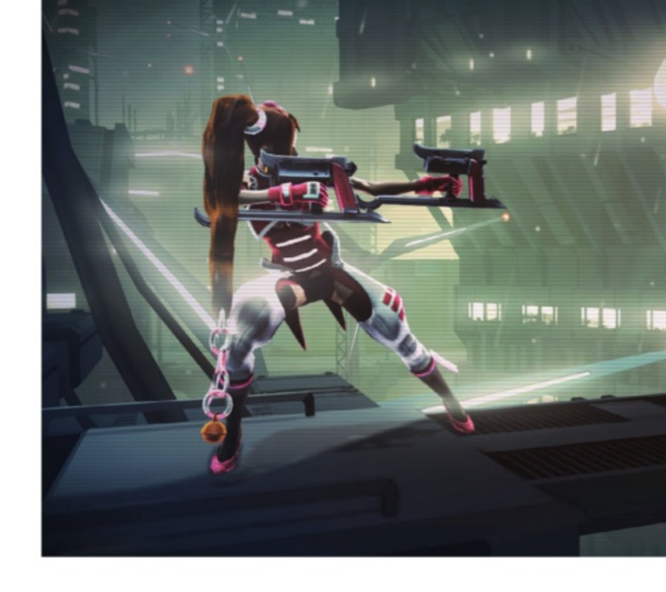


TOP LEFT **Despite the new perspective, *Volume* is very similar to *Thomas Was Alone* under the hood. Even though it looks 2D, *Thomas* was built in 3D due to the way Unity worked at the time.**
TOP RIGHT **While the promotional shots that Bithell has released are a little more dynamically posed than the in-game camera can manage, it will be possible to place the viewpoint as low as you like when making levels yourself.**
ABOVE **Bithell is aware of *Volume*'s resemblance to *Frozen Synapse*: "It comes down to the fact that Paul [Taylor] and I love the same stuff! And we've chatted about that, because I'm discovering all the reasons for the ways that *Frozen Synapse* handles things as I develop *Volume*!"**

ABOVE **As a follow-up to *Thomas Was Alone*, *Volume* is perhaps a surprising switch in tone. But Bithell had both in mind years ago, back when he was working on other people's games.**
RIGHT **Using the Bugle will enable you to distract these guards, who will walk all the way around to the source of the noise and then spend some time searching before returning to their posts**



Publisher Capcom
Developer Double Helix
Format 360, PC, PS3, PS4, Xbox One
Origin US/Japan
Release 2014



Hiryu can scale vertical walls by using his Cypher as a makeshift climbing axe. He can clamber along the underside of ledges, too, a technique that proves invaluable against the first level's dragon boss

STRIDER

Slicing deep into Hiryu's fast-paced return

Strider Hiryu is running late, and that's even taking into account that it took Capcom ten years to make an official sequel to his inaugural 1989 appearance. Our first hands-on with his modern return suggests he knows it, too, and is making up for lost time. This is a much pacier game than its predecessors, eight times faster in fact, with Hiryu cartwheeling over gunfire and slashing through his assailants at speed.

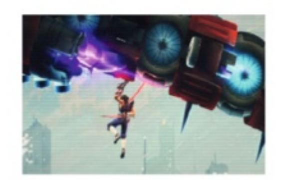
Well, that's the theory; our time with him is broken up a lot by the game over screen. These enemies die quickly, but hit hard. And while *Strider* features many concessions to modern design conventions, a gentle difficulty curve isn't one of them. In a project being made by both east and west – with Capcom Osaka the guiding hand and California's Double Helix the heavy lifter – that seems like a decision that came from Japan.

"It has more to do with heritage than anything," says producer **James Vance**, an American who works on the Capcom side. "There wasn't a directive from Japan. It just naturally progressed that way because the character's so fast, so fluid and dynamic. As you progress through the game, you become more powerful. [It's about] providing the player with a challenge first, before providing them with the means to overcome that challenge. But you're right, I guess that is more [from the] Japanese old school than most current western games."

The demo is a tweaked version of the opening level, with upgrades strewn around the multitiered map to give us a taste of Hiryu's expanded moveset. He's the same agent from 1989 at the outset, but before long he can deflect enemy bullets and gains two upgrades to his signature Cypher light sword.

Our hero's charge move is the only way of dispatching shield-bearing enemies. The demo prompts concerns that, rather than enabling a freeform combat style, the various Cypher powers will be tied to very specific uses





ABOVE **Enemies die a little too easily for our liking, even given their damage output. The demo is plucked from the first level of the game, however, and Vance assures us there is plenty of combo potential later on**



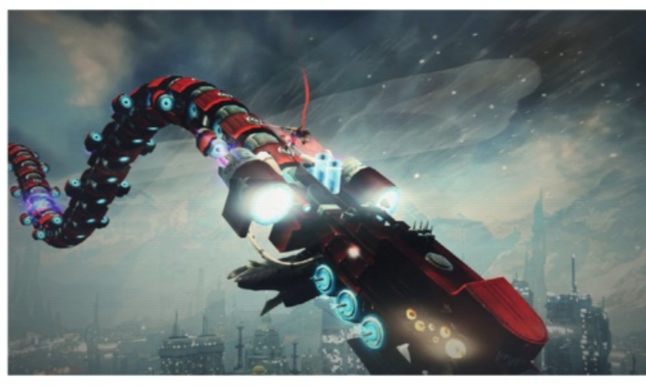


James Vance, producer





LEFT **Getting to the dragon's initial weak spot is a simple exercise in avoiding timed electrical force fields, but things are different when we reach the top. Clipping issues saw us disappear inside his head, and our attacks missing their marks**



TOP **The opening level is set in Kazakh City, which also played host to the first stage of the arcade original. Nearly 25 years on, it's immediately familiar.** ABOVE **Given that similar battles featured in both the original *Strider* and its sequel, the choice of a robotic dragon for the opening boss fight is a sensible one. The final game will be full of references to Hiryu's past exploits**

One is a charge attack that does extra damage and breaks shields, while the other has explosive properties. You switch between powers with the D-pad, and Hiryu's scarf changes hue to signify which is active.

Your powers aren't just combat-oriented. With his slide, Hiryu can squeeze through floor-level vents, while Cypher upgrades open different kinds of doors. Vance assures us there will be a combo system of sorts, though it's "not *Devil May Cry* or anything like that". These new moves gently expand the combat possibilities of a 25-year-old series while enabling a thoroughly modern, gear-gated structure.

It's immediately obvious this is a *Strider* game – that Cypher slash, that cast of cyborg enemies – but history isn't dictating its development. "The previous game was 15 years ago," Vance says. "There's definitely a segment of the gaming population that's attracted based on what we have to offer in the here and now, but they won't be familiar with some of the winks and nudges. I would say that most of the game is new."

New, perhaps, but familiar. Our demo concludes with a battle against a gigantic robotic dragon that's a clear nod to bosses from the past. Once again, the game over screen is a familiar sight, since Hiryu's health doesn't regenerate and pickups aren't too common in the sky.

Yet this project's difficulty level isn't its toughest balancing act. Despite recent policy reversals, Capcom is once again collaborating with a western studio. It's a decision made even more curious given the esteem in which this series is held and the choice of the unproven Double Helix. Vance, however, is full of praise for the studio, which is also

It's immediately obvious this is a Strider game, but history isn't dictating development

working on Xbox One launch title *Killer Instinct*. "They grew up playing this game, and had an idea about what is quintessentially Strider in [terms of] how he moves, plays and feels, which sold us on the idea of working with them. They were able to prove that quite early on. This is a creative endeavour; creatively, it's a 50-50 split. We have a collaborative role in all of it."

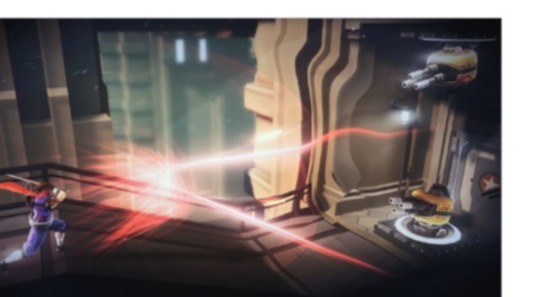
Capcom, however, retains the final say, and on this evidence much remains to be said. Hiryu feels too fast at times, and often the only way to find out if what lies below you is another platform or a fatal abyss is a leap of faith. This is also a game in dire need of a Capcom hit pause: the lack of visual clarity when bullets are deflected means you'll frequently take damage when you weren't expecting to, which feels especially unkind when death is so common. *Strider* is trying to strike several difficult balances – between east working with west and old butting up against new – but if it can't nail the fundamentals, none of that will matter. ■



New gear's resolution

Strider doesn't just straddle the divide between countries and audiences, it's also Capcom's first next-gen project as a publisher, releasing on Xbox One and PS4 as well as 360, PS3 and PC. "The PC version is DirectX 11 compatible and 64bit," Vance says, "and once we were more familiar with the specifications for PS4 and Xbox One, we knew that having a version on those two pieces of hardware wouldn't require that much additional work." Next-gen and PC versions will sport better visual effects, including GPU-computed particles, and run at 60fps in 1080p. Current-gen console versions will have to make do with half that framerate and 720p instead.

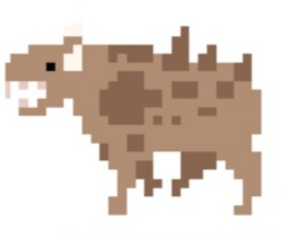
Hiryu gets the ability to deflect enemy bullets early on, but it's an unwieldy mechanic. You press up on the D-pad to activate the power, then slash with X to trigger the move, but the timing window is tight and enemies fire in long bursts



Publisher
Heart Machine
Developer
In-house
Format Ouya, PC, Mac, PS4, Vita, Wii U
Origin US
Release June 2014

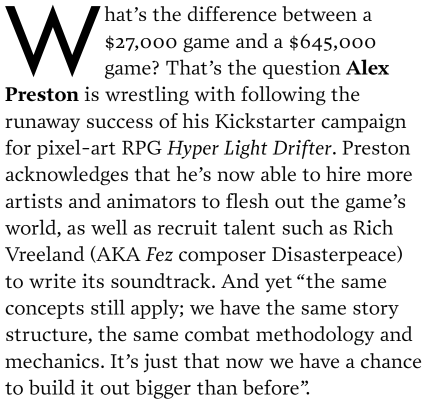






HYPER LIGHT DRIFTER

A crowdfunded triumph born from pain and nostalgia



What's the difference between a $27,000 game and a $645,000 game? That's the question **Alex Preston** is wrestling with following the runaway success of his Kickstarter campaign for pixel-art RPG *Hyper Light Drifter*. Preston acknowledges that he's now able to hire more artists and animators to flesh out the game's world, as well as recruit talent such as Rich Vreeland (AKA *Fez* composer Disasterpeace) to write its soundtrack. And yet "the same concepts still apply; we have the same story structure, the same combat methodology and mechanics. It's just that now we have a chance to build it out bigger than before".

It's not hard to see why *Hyper Light Drifter* captured the imaginations of so many. The trailer alone is mesmerising. "Two months of really solid labour" went into its creation, an effort that paid off handsomely when married to Preston's enthusiastic pitch and beautiful animated sprite art. The footage offers an all-too-brief glimpse at a rich world that combines influences as disparate as Hayao Miyazaki, *The Legend Of Zelda*, *Diablo* and Neon Genesis Evangelion. "I think people recognise the love that I have for certain games and certain cartoons and media in general," Preston explains. "So there's a shared experience there, and that resonates with people. You see across the comments [on the campaign]: 'Yeah, that looks like this,' or 'This reminds me of that.' I think people picked up on these little love letters that I put in there."

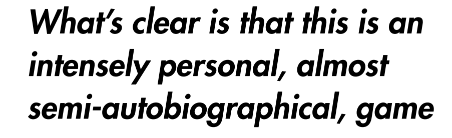


Alex Preston, creator of *Hyper Light Drifter*

Over 24,000 backers helped the game to pass a series of stretch goals, and there are now console versions in the offing for PS4, Vita and Wii U. Preston is keen to ensure that *Hyper Light Drifter*'s players have the same experience regardless of format. "Even if we put it on 3DS, we wouldn't just toss weird touch elements in there for the sake of having them, and it's the same thing for Wii U. Sure, we want to be able to play on [the GamePad's] screen, but it's a game that's really all about classic controls, and we don't want to change that for any one console. We want everyone to experience the game as we envisioned it."

That vision undeniably owes a debt to the beloved 2D action-RPGs of Preston's youth, as he happily acknowledges, citing the nostalgia factor as one of the reasons behind the success of the campaign. "If you enjoyed those experiences back in the day, but wanted something you couldn't have back then because of technological and memory limitations, then this revisits that in a scale that wasn't possible before."

The level of difficulty, too, should hark back to the 8- and 16bit eras, and Preston



What's clear is that this is an intensely personal, almost semi-autobiographical, game

admits many players are looking for a sterner challenge, pointing out the recent return of roguelikes. "There are too many easy fucking games these days," he concludes.

Preston's playing his narrative cards closer to his chest, however; he's determined that *Hyper Light Drifter*'s players will be able to discover the game for themselves. What's clear is that this is an intensely personal, almost semi-autobiographical, game – the drifter's malaise reflecting his creator's trials. "I got the crappy end of the genetic stick," says Preston, "and that's absolutely a factor with the character and the story."

Such testing circumstances explain why an idea that Preston has dreamed of for many years is only now coming to fruition. Yet if it's a tale that's set to reach a much wider audience than Preston first envisioned, there's been little deviation from the original plan. "I didn't care how many people played it," he admits. "I just wanted to make a game that I wanted to play. And I'm still making a game that I want to play." ■



What money can't buy

Preston may now be working with a bigger budget, but time constraints are important too – this is one Kickstarter project that's likely to deliver on schedule. "The timeline helps keep things in perspective. Just because we can do more things with more money, it doesn't mean we have the time to do it." That isn't to say that there won't be a few revisions – Preston says the game will now include "some of the goofier ideas we had" – but the focus is on finesse. "We're not revising it into some major open-world *Skyrim*-style RPG or anything like that," he laughs. "But we have a chance to refine the experience, where before it might not have been quite as detailed."





ABOVE **The titular drifter has many powers, but will reflect his creator's health issues. "That's absolutely a factor with the character – it's something he's dealing with throughout the narrative"**

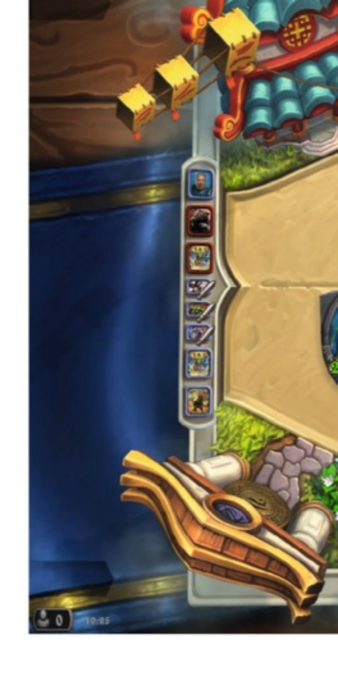
ABOVE **Preston is aiming to let the visuals do the storytelling. "I think that's such a crucial element of being a good director, when a game is able to expose its innards in a way that's meaningful without having to boil it down into words and extrapolate it."**
RIGHT ***Hyper Light Drifter*'s aesthetic is characterful and energetic, and it loses none of its appeal during combat sequences, which play out speedily but smoothly**



Publisher Blizzard Entertainment
Developer In-house
Format PC, iOS
Origin US
Release TBC 2013







HEARTHSTONE: HEROES OF WARCRAFT

Blizzard's card game is a mashup of cataclysmic proportions



BELOW Your card collection is stored in this foxed tome, which is split into tabs by hero. It's also searchable by keyword and card name, making deck building a matter of but a few minutes

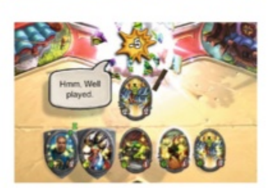
Twelve million. That's how many active players *World Of Warcraft* had at its 2010 peak. It's also the estimated number of Magic: The Gathering players there were by the end 2011. And since *Hearthstone: Heroes Of Warcraft* is exactly what you'd get if you rebuilt Magic as a videogame and skinned it in the cartoonish fantasy of Azeroth, it could have access to the goodwill of some 24 million players from day one. Blizzard's MMOG was big; its free-to-play collectible card game (CCG) may just be ginormous.

What the figures can't tell you is how much charm radiates from every aspect of *Hearthstone*, nor how much more accessible it is than Wizards Of The Coast's card battler. With 20 years of expansions and errata, plus the nontrivial upfront cost, Magic in 2013 has a fearsome barrier to entry. *Hearthstone* strips all that away, ditches the confusing clutter of the tabletop and handles all of its cards' interactions in bold, obvious ways. It's still geeky, but the kind with which many videogame players will feel right at home.

The basics are simple: whittle your foe's health from 30 to zero to win. That means tapping into your growing pool of mana crystals to play spells and minions onto the table, whose effects are then enacted with all the visual subtlety of the 1960s Batman TV show. Attacking cards fling themselves at their targets, spells trace neon pathways across the screen, and boosts to your minions' crucial attack and defence stats are shown with bright green digits. Where Magic lacks instant readability, *Hearthstone*'s pyrotechnics stop just the right side of patronising.

But the formula's digital rebirth also allows for new wrinkles. You'll be introduced to the first almost immediately in Practice





ABOVE Once cards are played, they are distilled down to their key stats and art. Minions with a shield border have a power called Taunt, which means the enemy must attack them instead of you or other cards





LEFT ***Hearthstone*** **highlights all your possible moves in green, so you know at a glance what you've yet to use or play. This keeps turns snappy, and contributes to the overall sense of flow**

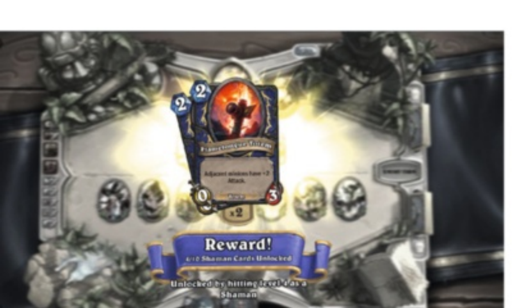


mode, where you can battle against the game's nine heroes to unlock them and their core decks. In these early matches, you'll discover each leader has a power they can activate once per turn, which are so grounded in convention that they'll be intuitive to any RPG player (the Mage can hurl a fire spell, the Warrior can soak up extra damage). The second twist is that, unlike Magic, the health of creatures is tracked across turns, meaning no foe is too big to wear down.

You'll leave boot camp having levelled up a hero a few times and unlocked some of the characters' basic cards. That's when the overt handholding stops and you can start making 30-card decks of your own. Veteran card battlers will be itching to throw together custom combos, but newcomers can opt to let the AI help out by soliciting its suggestions, or even abdicate the power of choice and have the game autocomplete entire decks for them.

Sensible constraints make going solo simpler, too. Everyone begins with a limited number of basic cards to get their head around, and decks come in just two parts, marrying a pool of neutral cards that are available to all your characters with a selection of hero-specific cards that subtly inform your strategies. In true CCG style, your options widen by buying blind Expert packs, paid for with real money or in-game gold. But while certain rare cards undeniably offer an edge, the balancing is good enough even in this closed beta that it's really your ability to build chains of effects that matters.

The basic cards are quickly unlocked, and form the backbone of early decks. They're a clever way to drip feed new ideas to players without overwhelming them



Take, for instance, our third ranked battle. We're playing with a Hunter deck that's heavy on Beast-type minions. Towards the end of the game, we have plenty of mana to spare, but both sides have annihilated each other's minions and the table is bare. We have two cards in hand, neither game-winners on their own. We play our Starving Buzzard first, which gives us another card every time we play a Beast. Then we play a Timber Wolf, and draw our bonus card. It's a Tundra Rhino, whose power removes the prohibition on attacking with Beasts the turn you play them. Suddenly, we can attack our opponent for seven damage in one decisive turn – enough for her to concede the match. It's the end result of an elegant learning curve that helps even those who'd never unwrap a booster pack quickly grasp complex card interactions.

And there are other signs of Blizzard's design expertise imbued in *Hearthstone*. The studio's long custodianship of Battle.net is evinced in the game's ranked play, which unobtrusively sifts the top players from those still learning to play, protecting its carefully constructed soft entry. There's card crafting, in which you can break down unwanted cards into all-purpose dust to make the ones you do want, taking the edge off the frustrations of blind purchasing. And there's the pay-to-enter Arena, where you build a new deck by repeatedly picking one card from a selection of three and then try to win as many matches as you can before you lose three times. The more you win, the better your rewards.

It's still geeky, but the kind with which many videogame players will feel right at home

Shuffle all that together and *Hearthstone* represents a rare kind of card trick. Warm and inviting, it's easy to pick up, but the depth of its card pool makes it hard to put down. The packed beta is full of players already ardently in love with it, but you can expect that mob to become a horde when it releases on PC and Mac later this year. When the iPad version follows, it might just take over the world. ■



Coining it

The very nature of turn-based games means they tend to be slightly biased in favour of the player who gets to go first. While *Hearthstone* randomises its first player via a coin toss, it does more to address the issue than that. Whoever ends up with the second turn is given an additional card, The Coin, which can be played to give you a bonus mana crystal for one turn only. It's the best kind of solution: one that presents tactical possibilities. If you're prepared to suffer in the short term, you can hang onto The Coin for a mid- or even late-game boost. Far from feeling penalised by losing the toss, we soon came to enjoy it and the possibility of springing a surprise on our enemies.



ROUND-UP

WATCH DOGS

Publisher Ubisoft **Developer** In-house (Montreal) **Format** 360, PC, PS3, PS4, Xbox One **Origin** Canada **Release** Spring



Our most recent look at Ubisoft Montreal's open-world hacker's paradise raised concerns over how its myriad systems would fit together coherently, and it seems the team behind it had similar worries. What was once among the next-gen launch window's most intriguing prospects will now arrive in 2014, since its development team has admitted it needs more time "to polish and fine tune every detail". It's disappointing, but Ubisoft has delayed big releases before – *Far Cry 3* slipped, and was all the better for it – and at least pushing back *Watch Dogs* will give *Assassin's Creed IV: Black Flag* more breathing room.

SCALE

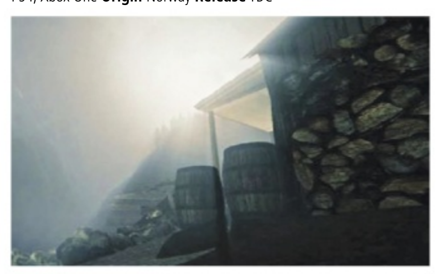
Publisher/developer Steve Swink **Format** Mac, PC **Origin** US **Release** TBA



Its setup evokes *Portal*, but designer Steve Swink compares this polygonal sandbox, in which your gun can shrink down or expand objects, to *Mario 64* and *Zelda*. There are some fine ideas here – making a butterfly so big you can ride on its back, or a house so small you can put it in your pocket – but *Scale* is a project of many challenges. A Kickstarter goal comes first, but then Swink, together with *Osmos* designer Eddy Boxerman, must turn this concept into a game.

DRAUGEN

Publisher Red Thread Games **Developer** In-house **Format** Mac, PC, PS4, Xbox One **Origin** Norway **Release** TBC



Red Thread Games is following *Year Walk*'s lead with a game based on Scandinavian folklore. Set in the '20s, *Draugen* is a firstperson horror title in which you explore a remote fishing village whose inhabitants have disappeared. The title refers to the Draug, undead Norse guardians of sunken treasure.

SOUTH PARK: THE STICK OF TRUTH

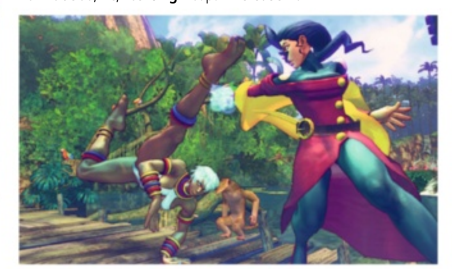
Publisher Ubisoft **Developer** Obsidian
Format 360, PC, PS3 **Origin** US **Release** March 2014



While Ubisoft's delay to *Watch Dogs* was full of positive spin, its assessment of *The Stick Of Truth* was more blunt: the publisher stated Obsidian's game needed a "major overhaul". A fresh look at this blend of TV-quality cutscenes and stodgy turn-based combat, however, hardly inspires confidence.

ULTRA STREET FIGHTER IV

Publisher Capcom **Developer** In-house
Format 360, PC, PS3 **Origin** Japan **Release** 2014



Still no news on that new character, but Capcom has revealed some dramatic changes for this apparently final update to *Street Fighter IV*. A Red Focus Attack can absorb multiple hits at the cost of some Super Meter, while you'll now be able to take both Ultras into a match, though they'll do less damage.



AND STAY DEAD

Permadeath just won't die. But what's behind the popularity of such a punishing mechanic?

Some say life's too short. It is when you're playing *Spelunky*. Our most recent journey into Derek Yu's mines ended in tragedy when a run that had seen us grab a jetpack, climbing gloves, a shotgun and a pitcher's mitt was cruelly cut short by an astonishing chain reaction. We set a bomb, which blasted a rock into an arrow trap, which fired an arrow, which fell on our head, knocking our dazed body onto a sacrificial altar. We had to watch as we sacrificed ourselves to the goddess Kali.

Still, it went better than our most recent attempt to save humanity in *XCOM: Enemy Unknown*'s Ironman mode. This one's embarrassing. Hoping to rescue as many humans as possible during a terror mission in Canada, we arrogantly rushed our star character, a sniper, ahead without scouting the playing field. The sniper strolled right into a Muton ambush, and the aliens followed up by slowly picking off the rest of our team.

Both of these experiences share common themes. Each starts with us not planning carefully enough. But both are compounded by the inescapable nature of our mistake: neither game offers us a chance to undo the damage, to rewrite the past. In *Spelunky*, we're sent back to the start of the mines without any of the gear we'd collected. In *XCOM*, we have to carry on playing with five fewer soldiers and one thoroughly unimpressed North American nation threatening to withdraw its funding. One game carries on, the other restarts, but death has permanent consequences in both.

When we talk about permadeath, we're really talking about permanent consequences for mistakes. Since games tend to be concerned with conflict, those consequences often manifest as death, but any unrecoverable mistake could apply. Mismanage multiple aspects of *XCOM*'s strategy metagame and you will slowly lose the support of eight nations, prematurely ending the experience. In practice, we're also talking about how a game handles data: consequences are only permanent if you can't simply reload an old save.

The idea of irredeemable failure might be anathema to many modern videogame developers, but it's rooted deep in the history of the form. "Boardgames, card games: those games all have lose conditions, especially if you're playing against other people. Someone has to lose," says **Jake Solomon**, director of 2012's *XCOM: Enemy Unknown*, a game whose no-reloads-allowed Ironman campaign mode sparked a resurgence of interest in videogames with permanent punishments. "Strategy games came out of that more traditional game experience. The goal is to learn a new system, and develop expertise at it. That's why permadeath is so affecting, because if you don't have it, you know the game isn't authentic. If a strategy game didn't let you lose, you wouldn't feel any joy at eventually beating the system."

The underlying threat of a fail state, in other words, adds tension to your *XCOM* games and weight to decisions, just as the permanent death of your troops forcibly reminds you of the possibility of total failure. "The fear of losing creates tension," says Solomon, "but on the opposite side, that creates the exhilaration of winning."

Any game with permanent death can cash in on this simple equation, and roguelikes have been doing so for years, recently spawning a number of genre-splicing descendants. *Spelunky* is a platformer of uncommon drama because a flubbed jump really can be fatal. *FTL: Faster Than Light* captures all the excitement of a space opera because you play in the knowledge that your entire crew really can die. Klei Entertainment's *Don't Starve* is a survival game genuinely about survival because death means starting from scratch in a freshly generated landscape. What all these games have in common is a dash of procedural generation. Not only does this mean that players aren't able to predict the threats heading their way, it softens the impact of the inevitable restart.

Restarting is, of course, the downside of permadeath. The wearying feeling that, after all you've just achieved, you have to start over again. Avoiding repetition is why indie developer **Tom Francis** worked the opposite of permadeath into *Gunpoint*, which autosaves every few seconds. Despite removing the sense of threat you might find in *Spelunky*, Francis argues that the ability to instantly restart and try something different in a sense achieves the same result as Derek Yu's game.

"I've always hated having to repeat myself in games, so I was pretty determined never to make the player replay anything they'd already done well," Francis explains. "I think Derek Yu has the exact opposite philosophy to me. I've heard him complain that *Mark Of The Ninja*'s checkpoints are too regular for him to get invested in the game, whereas for me they're not regular enough. But with *Spelunky*, he's

COLLATERAL DAMAGE

Normally when we think of permadeath, we're talking about the player's own character, or valuable units in a strategy game. Other games, however, have enforced permadeath by attacking the supporting cast. *Mass Effect 2* may have only let characters die at very specific points, but the notion that consequences would trickle down into the next game certainly gave any decisions made during a key mission a backbreaking sense of weight. *Fallout: New Vegas*' hardcore mode, meanwhile, didn't go quite as far as only giving you one save and one life out in the wasteland, but companion characters could die.

managed to satisfy both of us: extremely high stakes for death, but no repetition when you restart. [Death] changes everything from level structure down to individual jumping puzzles."

Other games have found different solutions to the dispiriting slump of a thrilling run followed by a restart. *FTL*, for instance, offers new ships for the player to unlock, altering the starting parameters of a run and requiring you to build your tactics around your new vessel's abilities.

One studio has come up with an even more drastic solution to the complications of permadeath: an RPG-levelling system that stretches the definition of 'roguelike' to its limits. Cellar Door Games' *Rogue Legacy* is a procedurally generated platformer that, on the surface at least, shares plenty of DNA with *Spelunky*. You die, restart from scratch, and the world reformulates itself to render previous strategies moot. There's a twist, however: a set of upgrades paid for with the loot you grab on each run, which help you make each generation of adventurer hardier and more powerful than the last.

"We like permadeath because it adds a strong sense of consequence to the player's actions. Strong not just in the sense of punishing, but in the sense that it's appropriate," says *Rogue Legacy* designer **Teddy Lee**, who also believes that randomisation and reformulation are crucial parts of a functioning permadeath mechanic. "At the same time, though, your standard roguelike is a little too punishing for us. We didn't like the binary nature of you die, [then] you start from square one. So we tried to make our game more lenient. We actually like to call it a 'rogue-lite', but that term never caught on."

Rogue Legacy's trick is to randomise your character's starting powers (and disabilities) in order to underscore the notion you're playing as a fresh person, even as your upgrades and equipment carry over. It cleverly blends the thrill of permadeath with the compulsive grind of an RPG, but there's no denying that some of the tension has been diluted. But that's not a failing, since it's exactly what Cellar Door had in mind.

"[Diluting the impact of death] was one of the motivating factors for us when we made the game," Lee says. "*Demon's Souls* influenced us a lot in this regard. We thought the way [From Software] handled death in the game was really brilliant. But it was still too punishing for what we wanted, and it also has the effect of discouraging exploration. For our game, we wanted to encourage exploration [and] make a game where dying is fun."

And dying is fun in *Rogue Legacy*. It's the bit where you get to spend money, pick a fresh, distinct character, and plan new strategies. It's not an endpoint or a fail state.

However, if developers opt for tension over compulsion and wish to preserve the impact of their fail states, they may well run risks along the way. The first of these is simply putting off potential players – people unwilling to invest time in a game that might reject their efforts. Such concerns have led to Nintendo opting to include a permadeath-free Newcomer mode in recent *Fire Emblem*s. "I think that all of the *Fire Emblem* games are fun," says *Fire Emblem: Awakening* director **Kohei Maeda**, "but a lot of beginner players stay clear of them because they think they are difficult. I think this is a real shame. A big reason for wanting to include this mode was so that those kinds of people could play *Fire Emblem* too."

More subtly, permadeath might end up adversely affecting the way players approach a game. When it came to our *XCOM* experience, we found that while Ironman mode made the overall journey through the game more tense and rewarding, it forced us to rely on conservative tactics. We couldn't run the same risks, couldn't experiment, without the safety net of a reload.

"You make a good point," Solomon says. "What Ironman did was expose some of the problems in the tactical combat. I mean, they aren't problems necessarily if you play without Ironman on. A very important part of tactical games is the idea of risk and reward. But the stakes were raised so high in Ironman, and the game doesn't care! You're like 15 hours into the game, and the game's like: 'I don't give a shit. If you lose this mission and wipe out your squad, you're probably fucked. That's the rules.' So the player can't evaluate risk on an emotional level; the player has to get dispassionate. The tension is ratcheted up quite a few notches, but the player is going to consistently do the safest thing possible. And if the safest thing possible, the 'best' way to play the game, is also the most boring way, that's not the player's fault. It's my fault. I think that Ironman, in the higher difficulty levels, really highlighted some problems in the design that wouldn't have come out if it wasn't for the mode."





Gunpoint **creator Tom Francis (top) and Jake Solomon, director of *XCOM: Enemy Unknown***

"THE GAME'S LIKE: 'I DON'T GIVE A SHIT. IF YOU LOSE THIS MISSION AND WIPE OUT YOUR SQUAD, YOU'RE PROBABLY FUCKED'"

"WHAT IF YOU COULD LOSE A SHOOTER? SIX HOURS INTO BIOSHOCK INFINITE AND YOU LOSE?"

It's hard to blame Solomon and his team for not quite foreseeing the full implications of Ironman, an optional mode and thus not the central focus of the design. Still, it's interesting to note that forthcoming expansion *Enemy Within* will scatter crucial resources over its maps, a ploy seemingly designed to lure cautious Ironman players out of cover. But if Solomon had the luxury of designing his game exclusively around the notion of permadeath, how would it change? Would it be easier to accommodate the inevitability of player failure?

"Oddly enough, no. We'd have to make the best way to play the game to be to take risks. And in *XCOM*, taking risks usually means moving. But it wouldn't be easier. Because in roguelikes – and Ironman *XCOM* has a lot in common with roguelikes – succeeding isn't the ultimate goal. The joy comes out of the risk, the struggle, and making it as far as you can. But in order for the game to be interesting, [I'd make it] more like a roguelike, about the struggle, about how far you could make it before you lose."

Maeda agrees that removing the threat of permadeath fosters a sense of experimental freedom in players: "Since your characters come back when they die [in *Fire Emblem*'s Newcomer mode], one advantage is that you can play more aggressively or take more risks."

Permadeath can cause structural and narrative headaches for game designers, too, especially in non-roguelikes. Just how do you write the permanent loss of character into your game? *XCOM* works because its soldiers have no direct role in narrative sequences, whereas *Fire Emblem* had to embrace the surreal notion of units you'd lost retiring from battle and yet appearing in cutscenes.

"In a story-driven game of today, having a lose condition doesn't make any sense," says Solomon. "What if you could lose a linear shooter? That'd be horrible, right? Six hours into *BioShock Infinite* and you lose? That's why I think lose conditions have become more rare."

It's funny that Solomon picks *BioShock* as his reference point, because Irrational's series has tried to work death into its fiction while avoiding longterm consequences. Rapture's Vita-Chambers provided realtime resurrection for players, while *BioShock Infinite* relies on Elizabeth (and its physics-bending story) to explain why Booker pops back to life each time he dies. Similarly, *Dark Souls* and *Demon's Souls* take place in worlds whose inhabitants are expected to die and be resurrected over and over. Crucially, none of these games' stories have had to explain why a player character has suddenly disappeared.

Still, two teams have recently tried to blend permadeath with traditional narrative design, and both arrived at similar solutions. Undead Labs' *State Of Decay* and Ubisoft Montpellier's *ZombiU* are zombie games about communities, not specific player characters. The death of whoever you're controlling just means a subtraction from the group, and control then switches to another survivor.

"[Writing *ZombiU*] was the toughest challenge I've faced in over ten years of writing for games," says story design director **Gabrielle Shrager**. "It took… the whole production team to try to find solutions for all the 'But what happens if you die here?' issues, which were sometimes mind-bendingly complicated."

ZombiU's clever solution is to turn its disposable player characters into proxies for an offscreen puppeteer, the Prepper, who sends them out to do his work, thus ensuring continuity of purpose and an overarching story. "I created the Prepper character and the survivors' notes to establish a link and reinforce continuity between the survivors who all fall under this mysterious character's influence," Shrager says. "Without a main player character, you need to embrace your main NPCs."

Even when you allow for this, disposable procedurally generated characters are never going to have the personality and charm of, say, *The Last Of Us*'s Joel and Ellie, especially when it comes to cosmetic details. As Shrager admits: "Our character assemblage system produced avatars that were less gorgeous than a single player character would've been."

Even though they're bumping up against narrative limits while trying to allow for designs that make failure more meaningful than just a visit to a loading screen, the designers of these games are embracing the potential of the form. Their games dare to tell different kinds of stories to the vast majority of their peers, where death is just an embarrassing deviation from a script borrowed from Hollywood. More importantly, by working death into their games, these studios are treating failure as something more engaging than just a weak motivation. They're making it something from which players can learn, an excuse for a fresh start, or an emergent twist in an evolving story of their own. ■

OPTIONALLY ORNERY

Sometimes, a hardcore, permadeath-focused community will emerge around a game that doesn't include the mechanic. A dedicated group of fans plays through *Pokémon* titles, for instance, with the strict instruction that any Pokémon that faints during battle must be considered dead and released, known as the Nuzlocke Challenge. Playing this way restores a sense of attachment to your captured critters that frequent trips to a life-restoring Pokémon Center can dilute, and a Nuzlocke run can be embellished with other rules, such as limiting the use of certain types of Poké Ball, or banning the use of legendary creatures.





Fire Emblem: Awakening **director Kohei Maeda and *ZombiU* story design director Gabrielle Shrager**



AN AUDIENCE WITH…

FUMITO UEDA

Ico's secretive designer on emotion, missing deadlines and parting ways with Sony

Fumito Ueda really can't talk about *The Last Guardian*. It's in his contract. The designer left SCE's Japan Studio back in December 2011, but returned as a freelancer to see his game to its conclusion. Still, his creative work on the project is now mostly complete – interpret that as you will – so the *Ico* and *Shadow Of The Colossus* designer is able to find time to give us a rare interview about the mechanics of emotional interaction and the shape of *SOTC*'s map.

Whenever the notion of games as art is mentioned, your games are among the first to be referenced. Why do you think people regard those games in that way?

I think the three reasons might be that I chose universal themes, that we made games that we ourselves genuinely wanted to play, and that we made them with great care. It's vital it rings true. More than a moving scenario, to really affect people you need a moving and credible story. The difficult part was that, in pursuit of credibility, I had to eliminate anything that seemed unnatural. That's the reason the games appear so minimalistic. [But more] broadly speaking, I think it's because those games are less mainstream than other titles. From a business point of view, artistic [value] is something that can increase a product's longevity. But, to be honest, while the potential videogames have for even more artistic expression is endless, without popular appeal, [making games] will not hold as a business.

What made you focus on designing games around emotionally resonant themes?

When I started working on *Ico*, I didn't set out to make such an emotional game; it just happened naturally. Whether or not I aim to make something emotional, it inevitably becomes so. I wanted to make a game where multiple characters onscreen weren't fighting each other, but rather you could touch them directly. With this in mind, and also taking into consideration the hardware specification at that time and the skills of the team, the best way to represent that idea seemed to be holding hands. And as the team's skills increased, I introduced the idea of 'clinging' as an extension of that hand connection in *SOTC*. Then, rather than invent a new mechanic, we started production of *The Last Guardian* to make use of the mechanics we had created so far. To create a system that lets you hold hands or grab onto a gigantic creature and move around, we had to fuse technology, mechanics and design in the closest harmony possible. There are lots of things [that I'd like to improve], but it would become endless, so I try not to think about that. The way I see it, that was the limit of what I could do at the time.

On the topic of *Shadow Of The Colossus*, where on its map had you planned to place the eight cut Colossi?

The map in the game is designed to house 16 Colossi. In other words, because the placement of those 16 Colossi determined the shape of the map, it would be a completely different map if we'd included all 24. The intention was to choose the 16 best Colossi and focus on making those ones even better. I think we were halfway through production when we decided to reduce their number. Oh, there's certainly leftover test data and half-edited [areas], but it's a bit like the Minus World in *Super Mario Bros*: I think it holds more romantic appeal if you don't know the specifics.

Do you ever feel your ambition is too big for the reality of studio budgets and deadlines?

Rather than my own ambition, I try to imagine what kind of game it is that people would want to play. There are

"As soon as Ico was like to make a game that display, so now I'd like to



CV

Fumito Ueda began his career as an animator at WARP in 1995, where he worked on Saturn exclusive *Enemy Zero*. He joined Sony as a designer in '97 and began work on *Ico* for PlayStation, but the game shipped for PS2 in '01. *Shadow Of The Colossus* would follow in '05 and soon thereafter work began on *The Last Guardian*.

restrictions on the production, of course, but that does not deter me from aiming to satisfy what I imagine to be the player. It's hard to say that my productions so far have found that balance, but I think I'm always trying to do right by the player. The part of me that is impatient [lets me down]. When I have an idea, I want to see the output quickly. On a long production, it is inevitable that your ambition will disperse from time to time. In those cases, I look at a great work – like a film, a game, that sort of thing – to remind me of the wonders of art, and that restores my momentum.

Can you give some examples?
Recent games that inspired me are *Beyond: Two Souls* and *The Last Of Us*. As for movies, rather than any specific film, it's the experience of an audience gathering at the cinema, the way the atmosphere of the movie combines with that of the theatre, [and] being part of a group of people who are in search of entertainment – this is a great stimulus for a producer of entertainment. It is encouraging to tangibly see a piece of entertainment touching people's daily lives. In recent years, I've found much more influence in films and art than in games.

Given your impatience, how taxing have the past eight years been on you as a creator?
Putting aside the short-term output, more than anything I feel terribly sorry that for various reasons I have kept my audience waiting for such a long time.

How do you keep your team motivated over a production cycle of five years or more?
Maintaining motivation is all about producing something great. A hobby or alcohol might help to refresh you temporarily, but they won't motivate creativity. Also, the original staff members on *Ico* and *SOTC* are just as fussy over details as I am. I always want to create quickly, and I always want to increase the rate of production. In the case of *The Last Guardian*, my creative work was mostly finished a long time ago, but the details of when, where and how it will be completed are beyond my control.

Do deadlines make your work easier or more difficult?
They make work much easier.

That being the case, how did *Ico* miss PlayStation and *The Last Guardian* seemingly miss PlayStation 3?
No comment.

***Enemy Zero* on Saturn was a difficult project for you, too. Were you able to learn much from the experience?**
As I recall, the development period of *Enemy Zero* was nine months [long], and on underpowered PCs. I had to use 3D applications that could make a maximum of three character animations a day, which included facial animations, and do all the lighting and camera work by myself. I learned that the speed at which you rush the work and the final quality are proportional.

At what age did you decide you wanted to make games?
There were two events that made me want to make games. One was watching an anime that had a 'video background' – that was the name of the technology – which impressed me. Then, at the age of 13, I bought an MSX computer. However, it frustrated me immediately. After that, it was pretty late that I joined Warp at 26 years old, and that set me on the path to *Ico*. I [was inspired by] Eric Chahi, Shigeru Miyamoto and Yu Suzuki. For a generation like mine, which has grown in step with videogames, you cannot escape their influence.

What do you consider to be art in a videogame?
That's a difficult question. I think 'art' is a product or notion produced by an 'artist'. As a commodity, it has low mainstream appeal but high longterm appeal; [it's] a thing for the future, like an F1 car. The definition of art is so ambiguous that it's hard to say, but I don't think the production time has anything to do with artistic value. By the way, I don't consider myself an artist, but a designer.

Why did you decide to go freelance?
It's difficult to explain, but in a nutshell it was because I felt a sense of crisis within myself about a lot of things. It's

finished, I said I'd uses a head-mounted research doing that"



Ueda tells us he's happy with the sales of *Ico* and *SOTC*, which have benefitted from enduring interest and HD remakes. *SOTC* even climbed to the top of the PSN charts during a summer sale in July, beating out *The Last Of Us*

hard to [say exactly what], but in terms of my own growth and career and so on.

Were there too many technical or creative challenges working at a large publisher?
This is not specific to SCE, but in general at companies where I've worked I've never been told to make a game in this or that genre and so on. I've been able to propose the kind of games I've wanted to make. So aside from available budget, you might say there's not much difference in that respect from an indie company.

What effect has going freelance had on your lifestyle?
For now, it hasn't changed significantly, but I have less of my time taken away by unnecessary meetings and so I am able to concentrate more on creative work.

What did it feel like to leave a company where you had worked for so long?
When I worked at SCE, I was on an annual contract, so it was not as much of a change as those around me might think. Recently, I've been working at my home office and often at SCE's Shinagawa office in Tokyo.

What was Sony's reaction?
It was not easy, but I can't go into the details just yet. It will be good to be able to discuss it along with a post-mortem of *The Last Guardian* someday.

What are you working on now?
The Last Guardian and the rest is secret. Outside of games, well, just for a hobby, I'd like to try my hand at art.

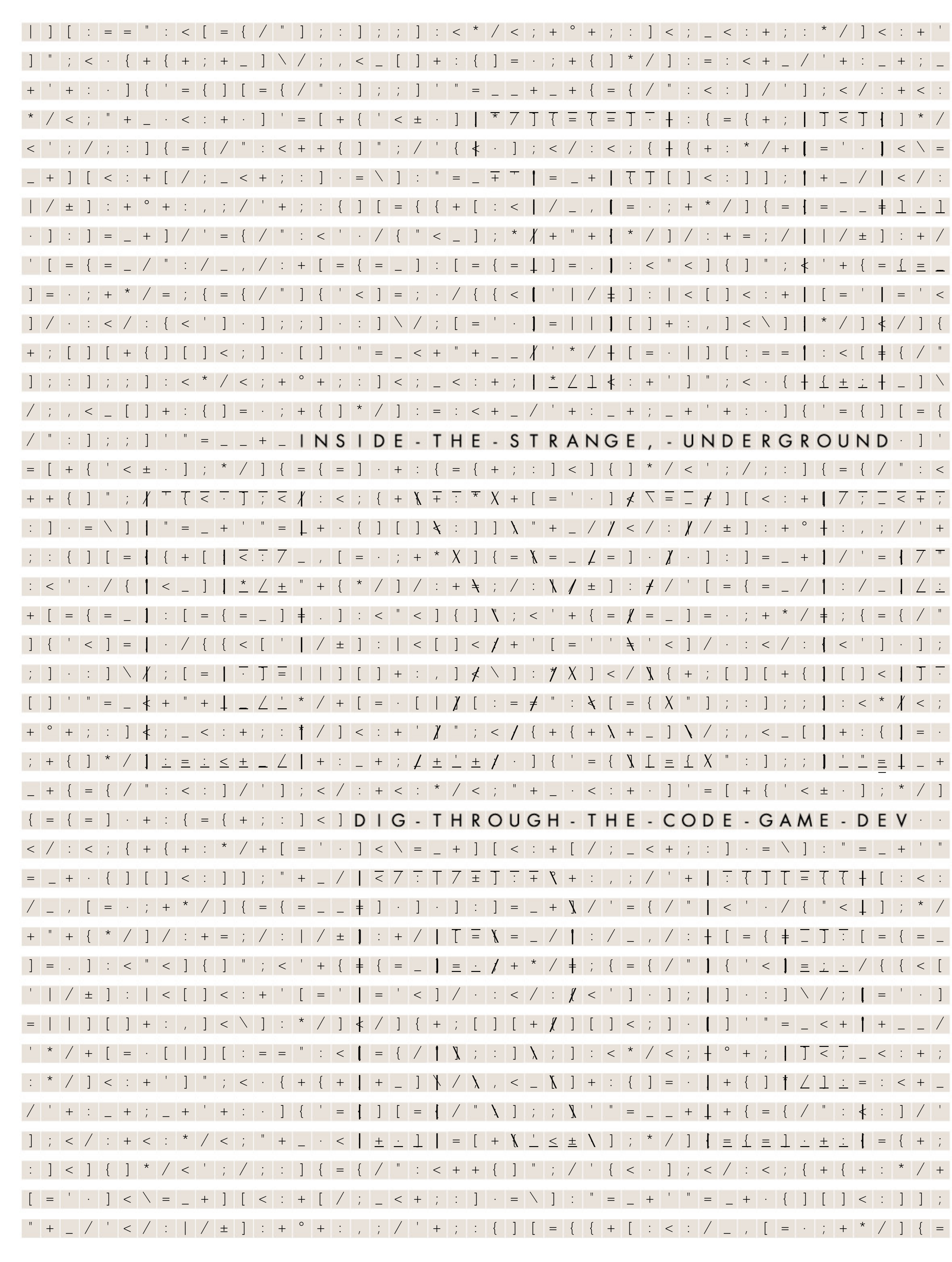
Do you think development processes will change significantly with next-generation platforms?
Videogames and technology are inextricable from one another. It will be like that for the next few years at least. Compared with the early days, game engines' creation and editing tools have given the artists and designers [greater] control. You will be able to control expression in finer detail. And I hope the speed of iteration will increase.

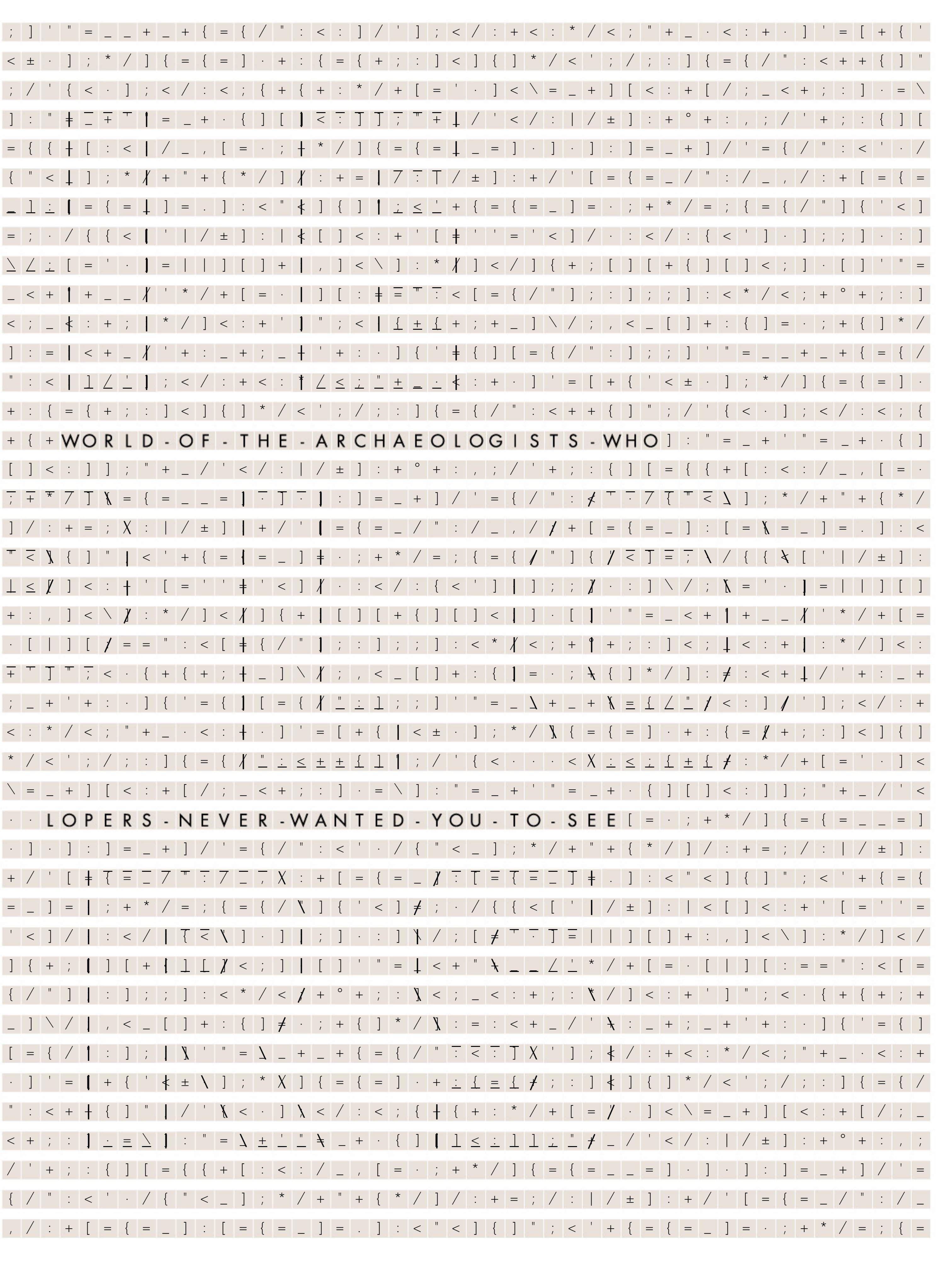
How do you feel about independent development?
I think that it has become more important than ever to choose your method of expression in relation to the budget. That is, I think the people who best judge the cost-effectiveness are getting the best results. It's easy to understand why players are attracted to big-budget games.

What are you playing right now?
A game I recently played through to the end is *The Last Of Us*, but there are others that I dip in and out of. I also bought myself an Oculus Rift, so I've been playing games compatible with that. This is, of course, for the sake of study!

You've wanted to make a game for head-mounted displays since as far back as 2002. How would you use virtual reality to advance your mechanics and themes?
I think there are many ways in which games are superior to other forms of entertainment, but more than anything it is the level of immersion that draws my focus. And what can enhance that sense of immersion better than virtual reality? Speaking in terms of mechanics, I think, rather than playing as a character that can move around freely, it is best suited to a character with movement that is somehow limited. As soon as *Ico* was finished, I told my boss at the time that I'd like to make a game that uses a head-mounted display, so now I'd like to research doing that. Also, this may be surprising, but one day I'd like to make a game on the theme of zombies. I'd like to try making a low-threshold game for hardware that is based around a touchpad. That's if I can come up with a well-suited idea, of course. There are many other things, too, but they're secret.

We're not short of zombie games. What's left to try?
With a zombie motif, in terms of AI and motion technology and the operability of the player character, there are many elements that interest me and that are suited to in-game expression. Especially if there is a way to use [zombies] not just as a convenient enemy for the player to shoot at, but in a way that allows me to express a character in a lyrical way. There are always possibilities. ■


INSIDE-THE-STRANGE,-UNDERGROUND
DIG-THROUGH-THE-CODE-GAME-DEV


WORLD-OF-THE-ARCHAEOLOGISTS-WHO
LOPERS-NEVER-WANTED-YOU-TO-SEE



pare a thought for those who shut down 1988 Famicom game *Erika To Satoru No Yume Bouken* (*Erika And Satoru's Dream Adventure)* when it ended. They never knew how close they were.

All they needed to do was sit on the screen that read 'End' for 18 minutes until its image of the game's characters turned black-and-white. From there, just another 18 minutes would see the picture turn sepia. The game's music would still be playing at this point, but would stop after a further 55 minutes, signalling to absolutely no one that the music from *The Karate Kid*, by famed composer Hirohiko Takayama, could now be played. How? Press A+B+Start+Select+Left on controller 1, and A+B+Right on controller 2.

The player who got this far would have intuited that nowhere in *The Karate Kid*'s music was a prompt to press B+Select+Right on controller 1, and B+Right+Down on controller 2. If they did that anyway, now an hour and a half into this insane process, it would play a message from programmer 'Hidemushi', from which we've had to remove names for legal reasons.

"Mmm, that's a nostalgic song playing. Those were good times," it begins. "Meanwhile, who the hell are these people with this project? I'm so glad it's over. You think it's nothing but good memories? Hell no! Let's use this space to give out some thanks.

"First off, [person A], who ran off with some guy in the middle of the project. Yes, you, you bastard. Don't show up at the office without showering after having sex six times the previous night. Next, [person B]. Yes, you, you bastard. Don't give me your flippant shit – coming in late on the day we ship the ROM like nothing's amiss. You can give me all the porn you want, I'm not forgetting that one. All that fucking weight you put on. No wonder you paid out 18,000 yen and still got nothing but a kiss out of it."

On it goes, naming further 'bastards' and threatening to send one back to the Edo period. More button presses reveal a heartfelt apology to Hidemushi's family, and 18 minutes later the game ends again, this time for real.

Erika To Satoru No Yume Bouken is a game about an everyday brother and sister searching for a magical crown on behalf of something that looks like a cat. It's probably the last place you'd expect to see a developer go completely postal on his colleagues. Spend enough time on The Cutting Room Floor website, however, and you soon learn to expect anything.

With 3,712 articles at the time of writing, The Cutting Room Floor (TCRF) is "a site dedicated to unearthing and researching unused and cut content from videogames". It's not the only one, but it's the biggest and most organised, and at the heart of a very real phenomenon you could call videogame archaeology.

Its tools and methods might seem familiar from the worlds of game trainer-making and advanced modding – debuggers, hex editors, memory scanners, and so on – but its objectives are different. The artefacts TCRF uncovers seem infinite in scope: a copyright screen confirming *Journey To Silius*'s former life as *The Terminator*; abandoned *GoldenEye 007* maps Statue and Citadel; unused messages from *System Shock*; the disabled right mouse button controls of *Mario Paint*; censored obscene passwords in *Ratatouille* for GBA; the address and phone number of Spearsoft programmer Nick Jones, stored at the beginning of *Alien 3* for the SNES. Like a museum, the site catalogues without prejudice.

Robert Flory, 33, founded TCRF as a small part of his personal blog in 2002. Hidemushi's tirade is a favourite of his "both because of the crazy steps required to activate it, and the rather harsh language of the message itself," he tells us. "It reveals a lot about the conditions a lot of developers were working under back then, and probably still are to this day."

His interest in digging through game code began with the discovery of text strings in DOS executables through basic tools. "At some point, I decided to learn 6502 Assembly [for the Famicom/NES CPU], which helped open the door to finding things like debug modes, stuff that was buried deeper than just graphics and text.

"At the time, it was really just a fun little hobby; it wasn't until I started finding things like hidden developer messages that I realised this could be something more important. I remember hacking *Super Mario Bros 2* and finding leftover bits and pieces of *Doki Doki Panic*, the game it was based on, and wondered what similar stuff was in other games. Still, though, it was just games that I was personally interested in, and that I had the ability to crack open and investigate myself – mostly NES [titles]. I knew very little about the other consoles."

For Flory, the most important of those early finds was a message from developers 'APO?' and 'KNT' in the ROM for SNK's *Guerrilla War*. Still viewable at his personal site, with its Matrix-

EARLY ACCESS

While old ROMs contain lots of buried code, unused elements are more likely to have been cut completely from modern games, since code is now so open to scrutiny by users and so potentially dangerous from a PR standpoint. That still leaves plenty of room for sites such as Unseen64, which specialise in game code that has never made it onto the retail shelf. Assuming you can get them, betas and debug code provide a much more complete glimpse at what might have been. Debug menus are one obvious entry point, while a forensic analysis can dig out plenty from a game like *Shadow Of The Colossus*, which contains a mother lode of orphaned ideas and areas.

green tables and background of ones and zeroes, this first entry comes with a plaintive request for a translator and just one phrase deciphered: "That third line is what Athena says at the beginning of every life in *Psycho Soldier*, another SNK game."

Updates to that first site were "sporadic," Flory admits, and only when he teamed up with web programmer **Alex Workman**, known to visitors as Xkeeper, did TCRF blossom into the comprehensive wiki it is today. Visit the page for *Guerrilla War* now and the translation is almost complete with gems such as "I managed to finish this game in two months! Let's hear it for me!" and "I hope there aren't any bugs…" Furthermore, a functioning minigame based on SNK's early *Sasuke Vs Commander* has been found in the Japanese version, with a font and space set aside for a never-implemented score readout. KNT also embedded his initials in the game in the form of hidden power-ups.

"I certainly didn't think it was important," Workman recalls. "It was basically a hobby for me, something interesting but ultimately just neat trivia. I think a part of it is seeing what could have been, and the other part is like getting to go backstage; you get to see the internals of things that are usually totally off-limits to people who aren't developers. You get to see the tools and features they use."

It is here, at the point where connections are made and meanings found, that someone like **Dr Monty Dobson**, a visiting professor at Central Michigan University and specialist in medieval archaeology, starts getting déjà vu. "One of the things that intrigues me about this is that it's an archaeology of ideas. That's referencing back to [Michel] Foucault; it may not be relevant, but it's this idea of how you work backwards through the past of ideas, moving downward through layers of thought processes. That's something I can see in the coding of these games: you go down blind alleys; things you thought could [work] but, by the time you get halfway through, they don't; or problems of budget. I've been editing a TV show where we had to abandon one episode – you have a script, episode treatments, a whole line of research that might never be used.

"A game really is like an archaeological site. Let's take a hypothetical medieval village that exists over the top of a Roman town, but has these occupational phases that go right through. You've never erased the past, and what's there now, in the modern world, is in many ways descended from it, or directly linked to it, but may in fact look very little like it. The parallels are really applicable to the archaeological process."

What brings the two fields even closer together is the people involved – their skills and backgrounds. Being a wiki, TCRF receives its 'artefacts' from hobbyists around the world. One of the bigger donors is GS Central (gscentral.org), a gigantic database of codes injected through memory patchers such as GameShark – hence the name. This site specialises in altering or enhancing a game's behaviour. Random example: turning GameCube's *F-Zero GX* into a pretty much fully functioning *F-Zero AX* coin-op, complete with title and tutorial cards. With 2.8 million such codes available, the variety is mind-boggling, even if "issues with people claiming ownership of codes or trying to charge money" may, Flory suggests, have soured its relationship with TCRF. "We're friends with Unseen64 [another 'unseen gaming' site], though."

Dobson finds the community comparable to the UK's Portable Antiquities Scheme, "wherein

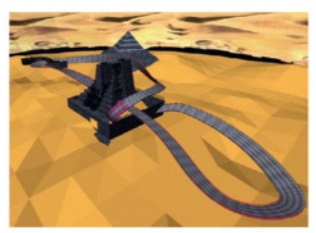




Guerrilla War **developer KNT's initials (top) are spelled out as hidden power-ups that would kill all enemies onscreen, give the player 1,000 points and grant a weapon. The** ***Sasuke Vs Commander*** **minigame can be accessed via an obtuse button sequence**







F-Zero GX **hides a mangled but playable version of arcade sibling *F-Zero AX* (top), which can be unlocked with a code. Stage 00, meanwhile, appears to exist to prevent crashes when using the stage viewer**

people are required and encouraged to report finds. Metal detectorists, these people with specialist tools and specialist knowledge who find things, are encouraged to report them. The Staffordshire Hoard [the largest collection of gold Anglo-Saxon artefacts yet discovered] that was found a couple of years ago is a great example of that. That was a metal detectorist.

"So, if you want to look at an analogy to actual archaeology, here is a member of the public who is not a specialist member of the 'archaeology club', if you will, who is out doing something similar or related to, but clearly not, archaeology. But some of the things they recover through the Portable Antiquities Scheme are contributing to that specialist knowledge."

Dobson's candidacy for inclusion in this article came about through a seemingly tangential post on his site (montysworldonline.com) about plans to excavate the infamous dump site of Atari's disastrous *ET: The Extra-Terrestrial*. "Can the digital age produce archaeological sites?" he wonders in the post.

"Academics are starting to think about that, and this is a case where the public is out ahead of research," he tells us. "Which makes sense; if you want to draw a line back to physical archaeology, antiquarians in the 18th and 19th centuries really were non-specialist members of the public, and they started having a look around going, 'Wait a minute, there are these things that are just coming up out of the ground. What is this stuff?' In terms of a digital archaeology, we're probably seeing something very similar."

One modern parallel is TCRF moderator and contributor **GoldS** (real name John, but he prefers not to tell us his surname). "The most interesting part for me is that it helps to provide a timeline for the development of games that don't really have much information on them. Things like old arcade games or older firstparty Nintendo games, most of which don't have any kind of pre-release information on them – and if they do, it's a couple of screenshots at most. Getting that kind of historical information on a game that's directly in the game itself is something that can't really be done in any other form of media. You can't hide that kind of information in a book."

Not in the same way, perhaps, but GoldS is further from the mark than he realises. "What's the real difference between looking in-depth at a manuscript?" asks Dobson. "Let's take something like the Lindisfarne Gospels. Looking at that under ultraviolet light, looking at the changes on the actual page that the scribe went through to lay it out… Or indeed a painting. If you think about art historical research, and looking between the layers of surface paint to see what the artist did in the process, it's very similar."

GoldS believes the most important article on the site covers the prototype for *The Legend Of Zelda*, "both for documenting the changes done to a very important, franchise-establishing game, and for bringing a lot of attention and new people to the site when it was brought up through some major gaming websites. Alternatively, the *Pachi Com* article for being interesting, even if you don't know what the game is, and for some behind-the-scenes info on the game's development and executive meddling."

'Interesting' is one way of putting it. *Pachi Com* includes a diatribe you could use to strip the paint off walls, barely hidden by an anonymous programmer, which takes up almost five per cent of this pachinko game's code. Aimed squarely at executives from publishers Toshiba and JPM, it starts with, "I'M SAYING WHAT I WANT FROM



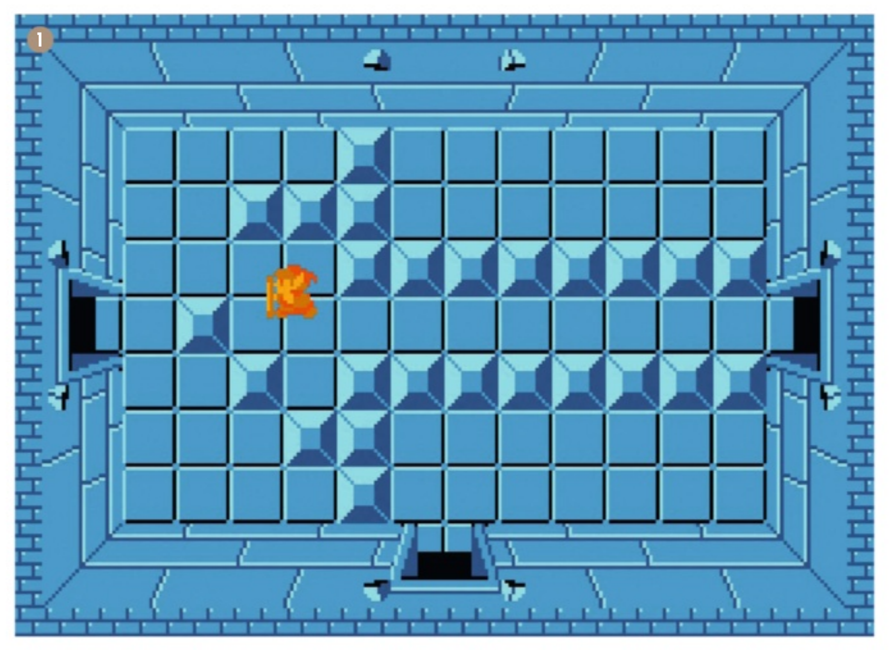
HEREON IN !!" in full caps lock fury, and only picks up steam from there.

"You RETARDS say one thing, then something else later all the time. I worked ALL NIGHT working on what you told me to; don't say to me "it was better before"! Who the hell do you think is going to play this, with its boring bonus stage and balls that get stuck? You're a sound company; quit ignoring pachinko sounds and trying to put these weird sounds in instead!" The developer then supplies hex addresses you can use to turn off the offending sounds and restore the originals, and assures the reader that "anyone who happens across this is a pervert!"

These are what Dobson considers the "shiny" finds, the ones that can grab the headlines. But perhaps what validates TCRF is its indiscriminate cataloguing of everything else. Because, just as in real archaeology, you never quite know what's going to be important. "It's building up layers and layers of information to help you understand what people are doing – that's the meat of what we do as archaeologists," Dobson says. "'How do I understand what these people were doing in this particular place and time?' And there's no way of knowing what ideas are collectively out there in dead-end gaming code that could potentially have revolutionised the industry."

Modern games are scarcer on the site, but there's a reason for that. Flory explains: "I don't know about fewer secrets, but it seems like the kind of secrets we're finding is changing. After incidents like *GTA*'s Hot Coffee, developers are a lot more careful about what they leave in games. It's much easier nowadays for anyone to open a game's files and poke around than it was in the days of ROM cartridges. We have a much greater number of tools available now than we did even ten years ago." DLC, he adds, tends to tie up a lot of loose ends.

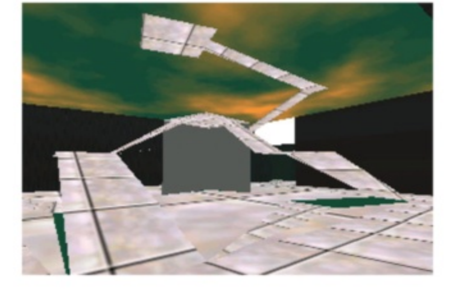
Weirdly enough, beyond what Dobson identifies as the often-destructive nature of real-world archaeology – "you dig a hole through the ground to a site, you ruin that site forever" – the big difference between that and its digital counterpart is that the timelines seem reversed. Archaeology, originally a pursuit of knowledge, is increasingly about preservation. But gaming's done that. Emulation as preservation has been pursued since it was technically achievable. What TCRF and its ilk have begun is a quest for forgotten knowledge. The games might be over, but their players' quests go on. ■











THE NINTENDO DIFFERENCE

It isn't hard to see why games for Nintendo platforms are such popular targets for sites like TCRF. Few game companies are more secretive, or sustain mass interest for as long. The prototype *Legend Of Zelda* ❶, for example, attracts more visitors than almost any other game on the site, yet the differences between it and the final version are iterative tweaks to colour, map layout and text. *Chrono Trigger* ❷, by contrast, has plenty of assets that never made it into the game, but attracts less interest. It's *GoldenEye 007* ❸ for N64, though, that really delivers. A ZX Spectrum emulator exists in the code, together with ROMs for versions of old Ultimate games; there's wholly unused music, and unused weapons such as the exploding pen; and three of the former Bond actors could at one point be played in bonus missions and multiplayer.



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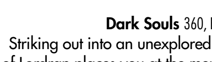




REVIEWS. PERSPECTIVES. INTERVIEWS. AND SOME NUMBERS

STILL PLAYING

Assassin's Creed II 360, PC, PS3
It might not be able to match the next-gen *Assassin's Creed IV*'s texture resolution or its sprawl, but *ACII* scales up well on PC and retains one advantage over its successor: from the soft pad of Ezio's hands and feet as he clambers up Rome's architecture to Jesper Kyd's magnificent score, *ACII* is an audio marvel. Switch the in-game dialogue to Italian, meanwhile, and things become even more atmospheric.


Dark Souls 360, PC, PS3
Striking out into an unexplored area of Lordran places you at the mercy of unkindled bonfires and their less-bountiful stock of Estus Flasks, but reverse hollowing to stoke the flames leaves you vulnerable to player invasions. Such considerations pale in comparison to the dangers of playing with a newborn baby on your lap, however, as we discovered when an encounter with a phantom ended in the loss of thousands of souls and a pair of vomit-soaked jeans.

Super Mario World SNES
Super Mario 3D World's choice of name sent us scurrying back to Mario's SNES outing. The magic endures, even if a 1080p panel does it no favours. We know these levels as well as our daily commute, and we could reach Cheese Bridge Area's second exit with our eyes closed. *Super Mario World*'s blend of secret exits, hidden levels and terraforming Switch Palaces rewards exploration as much as any open world.


REVIEWED THIS ISSUE



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Growing pains

The next generation is here at last – if only from thirdparties. The crunch for final polishing has kept firstparty Xbox One and PS4 games from our grasp, and struck *Driveclub* from the roster entirely. Yet thanks to Activision and Ubisoft, we've laid eyes and hands on the first wave of what we can finally start calling current-gen consoles. And the results are mixed.

If we're being kind, it's the need to create games across generations that's held *Assassin's Creed IV: Black Flag* (p90) and *Call Of Duty: Ghosts* (p96) back from their true potential. Naturally, both look better on new hardware, but these are slight upgrades to what has come before – higher texture and shadow resolution, better water effects, and tricks such as ambient occlusion and particle showers. *Black Flag* is an excellent game with the largest scope of any *Assassin's Creed* game to date, but that holds true irrespective of the generation of hardware on which it is played.



This is to be expected, and both *Black Flag* and *Ghosts* make a better case for new hardware than the games that appeared when the industry straddled a generational divide in 2005. Both are better showcases for PS4 and Xbox One than the likes of *Peter Jackson's King Kong* and *Tony Hawk's American Wasteland*, for example, were for Xbox 360.

Making sequels – which naturally come burdened with the weight of player expectation – is a challenge, especially across so many different hardware configurations. How unexpected that Nintendo, with *Super Mario 3D World* (p86), should steal the show with a follow-up on a year-old system that finally feels next-gen. We can only hope that Microsoft and Sony's new firstparty exclusives are anything like as good. We'll have our say on all of them in **E**262, of course, and on our website at edge-online.com.

Super Mario 3D World

Don't let the name fool you; it may say *Super Mario World* on the box, but there's no sign of Yoshi here and no cape either. While Mario's Tanooki form made a crowd-pleasing return in this game's closest relative, *Super Mario 3D Land*, there's no trace of that billowing yellow strip of magical fabric, which remains Mario's greatest-ever power-up. Taking its place is a bell that turns our hero – or Luigi, Toad or Peach, all of whom are playable in both single- and multiplayer mode – into a cat. Finish a stage while wearing this costume and the standard celebratory cheer is followed by a cloying miaow. Despite the name, on early evidence *Super Mario 3D World* isn't aimed at fans of a SNES classic, but furries and GIF watchers.

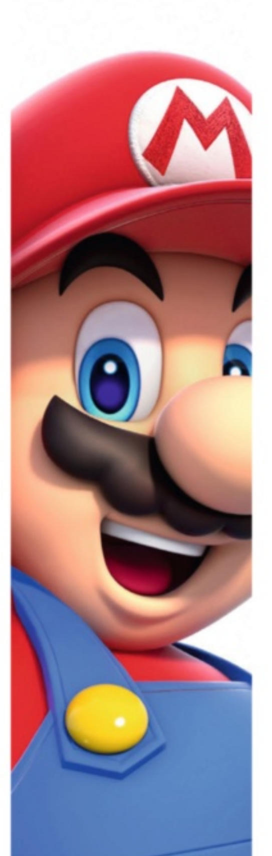
Claw a little deeper into the power-up's moveset, however, and you'll find that it empowers a greater level of fan service than even the cape could. As soon as you botch your first leap for the top of an end-of-level flagpole and watch as Cat Mario scrambles up it for the maximum score, it becomes clear that Tokyo EAD's mission is to subvert 30 years of *Mario* tropes, poking gentle fun at what we've come to expect from gaming's most recognisable figure. And in this, the year of Luigi.

Jump at a wall and you'll stick to it; press up on the left stick and you'll clamber up the sheerest of inclines, beyond which secrets often lie. There's no gradual slide back down to Earth as gravity takes hold unless you try to climb too far up a wall that leads nowhere, but when you do, you'll leave claw marks in your wake. This feline form is a useful offensive tool, too, with a two-handed attack that will knock back even the hardiest of enemies, deflecting Bullet Bills – the homing variety of which sports some adorable pink-lined ears of its own – off course. Hold down the attack button in the air, meanwhile, and that swipe will be followed by a dive move with a brief slide at the end that takes out ground-based enemies. It's a flexible power-up, then, and while it might not match the cape for the simple thrill of locomotion, it's got it licked in visual terms; in cat form, your protagonist trots around on all fours, head turning in curiosity at nearby objects of interest.

It's far from the only toy here, though. Our four playable characters have an embarrassment of wearable riches at their disposal, with the Super Bell joining the Super Leaf, Fire Flower, Super Mushroom, Propeller Box, Boomerang Flower and coin-spewing Prize Box in the *3D World* wardrobe. It doesn't end there, either, with a host of fleeting appearances from power-ups whose purpose, again, is to subvert. You'll head into a Ghost House or two with a head-mounted torch that can, for the first time in *Mario* history, banish a Boo back to the afterlife. You'll put on a hat that looses off cannonballs. And you'll carry your very own potted Piranha Plant that gobbles up enemies and has a ludicrous effect on an already chaotic multiplayer mode.

Publisher Nintendo
Developer In-house (Tokyo EAD)
Format Wii U
Release Out now (JPN), November 22 (US), 29 (EU)

It becomes clear that Tokyo EAD's mission is to subvert 30 years of Mario tropes, poking gentle fun at what we expect



Then there's the Double Cherry. While its design most readily recalls gambling machines, its effect is plucked straight from pinball. This is a *Mario* multiball, spawning a clone that follows you around. Get more fruit and you'll end up with another clone, and another, until half-a-dozen identical characters are responding to your inputs, throwing half-a-dozen fireballs at once, letting out six "wahoo"s in unison as you long jump for the flagpole. The Double Cherry's perhaps a little underused – you'll need clones to hit two switches, or use four of them to make a platform move that would otherwise only activate in multiplayer – but it's another sweet addition to *3D World*'s already bulging playset.

These tools are put into use across a world map that looks more like it belongs to the side-scrolling *New Super Mario Bros* games than a 3D *Mario*. But, in another subversive touch, you can now move freely around it, running and jumping where you please, rather than being bound to a fixed path. The number of stages varies from world to world; some have a boss halfway through as well as at the end, while others will involve a single-screen fight with an enemy or two that's blocking your way on the map. There are no secret exits here, sadly, though surprises do pop up on the map as you collect green stars. Each stage contains three of these twinkling prizes, and your progress through the game will occasionally be blocked until you go back and collect a certain total of them by rinsing the worlds you've already visited.

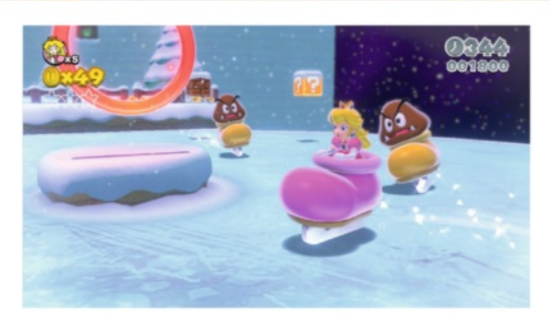
Worlds contain familiar distractions – Toad Houses yield items, while a gigantic four-reeled fruit machine that spits out extra lives fondly recalls *Super Mario World* – plus a few new touches, too. Mystery Houses build on *Super Mario 3D Land*'s Mystery Boxes, ten-second challenges that demanded speed of thought and reflexes and offered up a Star Medal in return. While Mystery Boxes are still found in *3D World*'s levels, the Houses occupy their own space on the map, and string five or ten such challenges together. Fail the tenth and you'll have to do the first nine all over again. There's much greater variety than on 3DS, though. You'll have to do plenty of precise running and jumping at speed, of course, but elsewhere you'll guide a ball through a maze of platforms whose layout changes when you jump, and take out crowds of out-of-reach enemies with a well-placed baseball throw. They're a fantastic change of pace, distilling Tokyo EAD's obvious design talents down into a string of perfectly formed, ten-second snippets of fun. It's one of the few things in *3D World* that feels truly new for the series, even if its inspiration comes from within Nintendo's existing stable. This might as well have been called *Mario Ware*.

Yet *3D World*'s biggest leap forwards is apparent within seconds of loading up the game, when the

ABOVE There are some smart pipe-based puzzles – both enemies and fireballs travel through them – but they're also used for automated traversal between areas. In that sense, they're *3D World*'s closest relative to *Galaxy*'s Launch Stars.
LEFT These ant-like creatures can't be killed. While they start out as a hazard, they soon offer a helping hand, walking across a field of spikes while you bounce up and down on their rotund purple backs



BELOW These infantrymen lose their cool when you stomp on one of them, dropping the regimented alignment and running around in circles. They're hard enough to track when there's just one of you



ABOVE Stomp on a Goomba here and you can pilfer its ice skate, letting you slide over nearby spike pits. Coins are laid out in inviting circles, and collecting them all in one smooth motion quickly becomes an obsession



ABOVE **Cat form may be no cape, but it's a flexible tool, and levels often have an upper tier that's relatively free of hazards to reward explorers. Fall off here and a quick claw swipe will dispatch the Bullet Bills beneath**

plumber and friends gambol about the title screen in their impossibly fuzzy catsuits. *New Super Mario Bros* may have dragged Nintendo's mascot into the HD era, but laying eyes on a 1080p 3D *Mario* for the first time is like scales falling from your eyes. *Super Mario 64* and the *Galaxy* games are some of the best ever made, but you needed a little of your own imagination to get the best out of them. You had to pretend not to see those sharp edges; you learned to look past the pixellated planets. Now, finally, Mario has the visual fidelity to match the brilliance of his designers.

It's beautiful, and it's little wonder to see some of the Mushroom Kingdom's longest-standing inhabitants revelling in it. Goombas loll about in crystal-blue waters, held afloat by striped inflatables. A trio of Koopas goes for a beachfront stroll, lit by screen-corner god rays from an unseen sun. Series staples – burnt-orange sunsets; dark, dank caves; ice-white snowscapes and burning-hot lava – take on new life. And in the middle of it all is Mario, gaming's most graceful mover, his locomotion and moveset refined over decades.

Mario's not alone, of course. You can change characters at the start of a level, but neither Luigi's higher jump, Peach's longer one, nor Toad's greater walk speed provide incentive enough to do so. Mario, after all, has a backflip, long jump and run button, so his cohorts' abilities aren't anything special, and the minute you switch to someone else is the minute *3D World* stops feeling like a *Mario* game. In multiplayer, those who don't play as Mario will readily blame their poor end-of-level leaderboard placing on who they used, and they may well have a point. The setup itself doesn't help, being perhaps a little too frantic for its own good, the camera tracking whoever races off ahead and punishing those who want to ferret out secrets or explore. An option to randomise characters at the level start screen goes some way to alleviating the problem of who gets to be the title attraction, but all it's really doing is spreading out the frustration.

In singleplayer, what little frustration there is comes not from difficulty, but repetition. While some stars are hidden behind devious puzzles and tight platforming, the levels that surround them are forever the same. Thankfully, you'll only have to backtrack a handful of times, mostly late in the game, and the rewards are well worth it. This may not pull quite the same endgame trick as *Mario 3D Land*, but suffice it to say it's a generous package, one that keeps on surprising and revealing new challenges long after the credits roll.

It seems odd that Nintendo should release a Mario-helmed game at all in a year supposedly devoted to his brother, let alone one that should prove to be Wii U's best game to date. Yet there is more than fraternal rivalry at stake here. In the same month that its platform holder rivals debut their new hardware, Nintendo has issued a timely reminder that it is games that sell systems, while also setting a new visual benchmark for the most treasured series in gaming. This is Mario like you've never seen him before, and unlike so many of his next-gen rivals, he nips along at an effortless 60fps. If the true measure of new hardware's worth is how stark the difference is between it and what came before, then this is the most next-gen game that 2013 has yet produced.

9



'SHROOM WITH A VIEW

While the Toad that's playable throughout the main game can run and jump and keep pace with his comrades, one of *3D World*'s sideshows puts you in control of a very different mushroom-headed adventurer. In The Adventures Of Captain Toad, all you can do is walk, so mining these cuboid levels of their five green stars requires great care – even the humblest of foes is a great threat. These sections are the only parts of the game to give you full camera control with the right stick, and you'll need it to plan routes, guiding Toad through gaps that are only visible from a certain angle or onto lifts that were obscured by scenery. In one, you hit P-blocks to cause gravitational shifts, turning a wall into a floor in order to bring a seemingly inaccessible star within easy reach.

Post Script

After a generation on the sidelines, Mario resumes his role as a system seller

He's back. Not that he ever really went away, but Mario spent the greater part of Nintendo's most successful generation to date watching from the sidelines, playing only a supporting role in his creator's most unlikely and unexpected triumph. DS was a huge success thanks not to the long-standing fans who queue up for Nintendo hardware on day one, but a brand-new audience, an entirely different kind of player lured in by the cutesy tactility of *Nintendogs* and the self-help trappings of *Dr Kawashima's Brain Training*. It was a similar story for Wii, with a host of consoles sold off the back of *Wii Sports'* simplicity and *Wii Fit*'s promise of a thinner, better you.

It's not that Mario took the generation off. In many ways, he worked harder than ever. On Wii alone, he lent his name to over a dozen games that sold more than a million units. The console played host to the best-selling *Mario Kart*, and *New Super Mario Bros Wii* also flew off the shelves. The *Galaxy* games might never be bettered. But Mario, for perhaps the first time in his career, wasn't selling systems. Indeed, Wii was six months old before the plumber made his debut in *Mario Strikers Charged*, the first of several middling sports games to which he would loan his name and likeness.

What a change of pace for the plumber, and what a departure for Nintendo. Mario has, for almost the company's entire time in the videogame business, helped to sell its hardware. *Super Mario Land* launched with Game Boy; *Super Mario Advance* debuted alongside Game Boy Advance. DS had a remake of *Super Mario 64*. By contrast, the best-forgotten Virtual Boy had only *Mario's Tennis* to support it.

It's the same on home consoles. *Super Mario Bros*, an NES launch title in the west, was the best-selling game in the industry for 20 years. *Super Mario World*, a SNES launch game that was bundled with the console for much of its early life, sold over 20 million copies. Then Mario made the most convincing argument not only for N64, but also for gaming's move into 3D with *Super Mario 64*. GameCube's problems went far beyond its lack of *Mario* at launch, of course – the biggest of them all being PS2. Yet you sense a few Nintendo execs used to lie awake at night wondering whether things might have been different had it been Mario instead of Luigi on shelves alongside the console on day one.

In that context, moving into the Wii era without a launch-day *Mario* game was brave almost to the point of stupidity. But it worked: Wii sold in its droves to people who could barely pick the plumber out of a police lineup of videogame characters, and *Wii Sports* shattered *Super Mario Bros'* sales record. Mario only gets into the top-three-selling Wii games with *Mario Kart Wii*, which appealed to Nintendo's new audience not for its design, but for its accessibility, which it owes to the Wii Wheel. *New Super Mario Bros Wii* continued that trend, being played with the Wii Remote on its side and making use of the D-Pad and just two buttons.

Moving into the Wii era without a launch-day Mario was brave almost to the point of stupidity. But it worked



This is instructive. 3D Mario, as we knew him, had no place on Wii. Nintendo made the console out of the belief that games had become too complex to appeal to anyone but the people who had grown up playing them. That didn't just mean shooters that used every button on the pad; Mario, with a moveset that had grown in size and complexity ever since his genesis, was every bit as guilty. The plumber was relegated to mascot status, the face on the box that gives humdrum sports and board games a better chance in a tough market. It's a blessing that we got the *Galaxy* games at all.

And given that trend, it's perhaps understandable that 3DS launched without so much as an announced *Mario* game. Soon Nintendo, unwilling or unable to recognise that the expanded audience it had done so much to create had been stolen by Apple, was so stung by the handheld's low sales that it slashed the price. No doubt that price cut helped, but two games are widely credited with sparking a turnaround in 3DS's fortunes. Both were aimed not at the *Wii Fit* or *Nintendogs* crowd, but the die-hard players who, burned by a system that yielded two of the finest games ever made but little else, thought themselves put off Nintendo for life. There was *Mario Kart 7*, which eschewed its Wii predecessor's drive for accessibility and instead returned to the tight cornering and balance of the originals. There was *Super Mario 3D Land*, a game not for *NSMB* players but the *Galaxy* crowd, one whose friendly opening few hours gave way to some of the toughest challenge and smartest design of the whole series.

With 3DS's continuing strong performance, it's little wonder to see Nintendo trying to repeat the trick on its struggling home console, first with *Super Mario 3D Land* and then, early next year, *Mario Kart 8*. Wii U, after all, is doing so badly that its European sales in Nintendo's most recent financial quarter were negative, with retailers returning more units than they sold. *Wii Fit U* might help, if Nintendo can convince a few million people to dig their Balance Boards out of storage, but it says much that the game's male and female trainers are playing supporting roles in the next *Super Smash Bros*, another game aimed at Nintendo's core audience. Satoru Iwata recently warned investors that one game can't revive a system alone, but history suggests that if anyone's games can do it, it's the red-suited plumber's. He's right up against it this time – Wii U has an awful lot more competition than 3DS did – but only a fool would bet against him doing it all over again. ■

Assassin's Creed IV: Black Flag

The pirate's life for you. That's what *Assassin's Creed IV: Black Flag* promises, and the fantasy it delivers sets new benchmarks not only for Ubisoft's series but for open-world gaming. You are Edward Kenway, a privateer-turned-pirate seeking riches and renown on the high seas in the years prior to the events of *ACIII*. That game, of course, drew criticism for its gratingly earnest protagonist – Edward's grandson, Connor – and for the sly edutainment of toggling between historical settings and cameos of important figures. *Black Flag* hasn't abandoned the series' love of history, but Ubisoft Montreal lightens proceedings with bawdy humour and lovable seafaring drunkards aplenty. The recipe that makes Caribbean cruises such a popular holiday – sunshine, open water, gorgeous beaches – is the same one that makes *Black Flag*'s virtual world so enticing.

From a graphical standpoint, *Black Flag*'s world is built to amaze regardless of which console generation you're playing it on. The fact that it was developed for the current generation and ported to PS4 and Xbox One means we're talking about marginal sweeteners, not a generational leap. The tropical foliage in jungle environs has a more dynamic lilt and sway. Watching a cutscene of Kenway speaking to his quartermaster Adéwalé at the stern, the current-gen version assumes your eyes are focused on the conversing men and soft-focuses the background details such as water and passing land, while the PS4 version maintains distinct water surface detail and crisper wood textures on the boat. It's noticeable, but feels more like the step up we've become accustomed to between existing console and PC games.

It wouldn't be an *Assassin's Creed* game if the main quest thread didn't eventually veer into the fantastical, and so it's with little surprise that we discover that *Black Flag*'s plot hinges on a crystal cube containing human blood. The series' affection for Lost-style sci-fi inscrutability has been dialed back considerably, however. At its core, *Black Flag* wants to be an old-fashioned pirate yarn of the kind that packed out cinema matinees a few decades ago.

Sadly, a number of the mission varieties used to unpack this tale cause the game to intermittently take on water. Cumbersome tail-and-eavesdrop exercises make an encore appearance, but at least checkpoints are more liberally apportioned than ever. Worst of all is naval stealth. Who thought it would be a good idea to have us navigate a claustrophobic waterway dotted with watchtowers and trying to evade notice while piloting a giant barge? Cover of darkness only goes so far.

Still, the choppy waters of the campaign never stick around for long. Infiltrating outposts to reclaim treasure or kill a target is a sneaky thrill. The influence of *Far Cry 3*'s outpost design looms large, too, with the freedom to approach targets from a full 360 degrees. Unless you have a superhuman resistance to *Black Flag*'s bountiful distractions and barrel straight through the main quest line, your buzz won't be remotely threatened. After all, isn't freedom really what the pirate fantasy is all about?

Publisher Ubisoft
Developer In-house
Format 360, PC, PS3, PS4, Wii U, Xbox One
Release Out now

The same freedom you enjoy while circling rivals on the ocean like a shark also extends to stealth missions



ROLLINS IN THE DEEP
Black Flag aspires to be what you'd get if you reskinned *The Legend Of Zelda: The Wind Waker* with photorealistic textures. You'll savour the exploratory rush of standing at the helm with mist-covered cliffs passing off the starboard bow, knowing you can moor the ship to any one you choose and go exploring. Inland there are remnants of Mayan architecture to discover, majestic waterfalls, treasure maps, smuggler hideouts, and opportunities to hunt the wildlife, the products of the latter driving a *Far Cry 3*-style crafting system. But the world only reveals its true depths when you purchase a diving bell that will let you poke around shipwrecks on the ocean floor. You'll hold your breath in real life as multiple sharks swim into view and you get your first taste of underwater stealth.

Black Flag periodically jars you awake from the pirate simulation and into the game's 'real world', where you play as a new employee at Abstergo Entertainment, which seeks to commercialise genetic-memory tech in a fashion similar to Total Recall. Some shady character from the IT department gets in contact and coerces you into hacking coworkers' terminals. (The hacking minigames are short and sweet, not at all like the pipe-matching clumsiness of *BioShock*.) The story's attempt to draw together two distinctly disparate strands of piracy isn't exactly subtle, but you'll want to figure out the endgame here before the game's end.

Back in the Animus, there are echoes of Bethesda's open-world RPGs, gradually taking you from straw-chewing peasant to legendary badass, so much is there to upgrade. Use your plunder to expand Kenway's arsenal. Outfit your ship, the Jackdaw, with stronger cannons, or a fetching red-striped sail. Build taverns, brothels and beach-party bonfires in your very own hideout on the Inagua islands. Craft inventory and health upgrades out of animal pelts. The UI has been streamlined since *ACIII*, so you'll spend less time flitting through menus and more time puffing blow darts at howler monkeys or harpooning whales.

We never felt like we had enough gold to buy everything we wanted, which seems engineered to push you out to sea to do what pirates do best: raid other ships. You peer through your spyglass to see what cargo they are carrying, then decide whether to engage in naval combat. The choice can be a fraught one. A high-level ship might be carrying a huge supply of metal that you need to upgrade your hull, but you know she'll be a beast to subdue and neighbouring vessels will quickly set their sights on you. There's enough skill to naval warfare to make shrewd risks profitable, though. While certain missions would warn us the Jackdaw wasn't sufficiently upgraded, that just made it all the more satisfying to emerge victorious anyway.

The naval combat missions were the best thing about *ACIII*, and their foregrounding here shows that Ubisoft knows it. Plundering other ships is a multi-stage process of disabling them and then swinging aboard for a deck-based skirmish. The emergent wrinkles of dynamic weather and potential engagement from nearby ships helps to keep these battles eternally fresh. But the same freedom you enjoy while circling rivals on the ocean like a shark also extends to stealth objectives in Havana, Nassau, and other settlements. Stealth games are only as good as the flexibility of their encounters, and in that regard *Black Flag* is the most generous *Assassin's Creed* game to date.

9

RIGHT Pirates don't close for business when the sun goes down. We engaged in naval warfare beneath full moons, but perhaps the most memorable battles were the nighttime ones amid storms, lightning and huge rogue waves





ABOVE *Assassin's Creed IV: Black Flag*'s plot incorporates historical figures such as Woodes Rogers, a famed English sea captain, and Commodore Peter Chamberlaine. **LEFT** You won't spend all your time hunting for trade vessels packed with cargos of rum and sugar. There are also numerous tropical animals scattered about the Caribbean to skin for crafting materials



BELOW Ship boarding plays out in realtime after you've sufficiently weakened your foe's defences. Swing aboard in dramatic fashion via rope and bring the opposing crew to heel in an on-deck skirmish



Post Script

Interview: Jean Guesdon, creative director

Ubisoft Montreal's **Jean Guesdon** worked as a designer on *Assassin's Creed II* and as part of the team overseeing the larger franchise before joining *Black Flag* as its creative director. We talk to him about the various ways in which this pirate epic charts new ground in the post-Desmond era.



***Black Flag*'s world opens up for exploration much earlier than *ACIII*'s did. What inspired that?**
We knew we wanted to get directly into the action. *ACIII* ended the Desmond cycle, so he's gone, and we thought it would be a good thing to start *Black Flag* directly in the past without delaying the moment at which the player will play what he wants to play – what he's been sold for months on the marketing side. So there's roughly a 20-minute prologue, and there's a technical reason behind that in terms of the link to PS4, allowing it to install that first package at the start of the game and be able to download the rest while playing.

Sailing across the open ocean and exploring islands recalled some of our favourite moments from *The Legend Of Zelda: The Wind Waker*. How overtly did that game inform *Black Flag*'s design?
We had several games like that as references. So, yes, *Wind Waker* was one of them. *Sid Meier's Pirates!* was another. They were really interesting, because they were successful naval games, which is pretty hard to achieve, and we quickly came to understand why. It's hard to do. How do you keep sailing interesting and not boring? Especially in our case, because we wanted to keep the *AC* style of being realistic, so we had a lot of challenges. *Wind Waker* is probably closer to our game than *Pirates!*, but the opportunity to use fantasy elements that pop up in front of the player was something we couldn't use. Those games were inspirational in terms of knowing a good pirate game was feasible and [they] helped us identify the areas where we needed to focus.

Because the Desmond story wrapped up in *ACIII*, it feels like you took the liberty to experiment with new ideas, especially in the present-day sequences.
The decision to [kill] Desmond in *ACIII* was made a long time ago, and it was driven by the question of how we make the franchise evolve from what was in *AC*, a well-designed offline solo experience, to a more open franchise. We're in 2013 and a lot of things have changed with mobile, Facebook, everybody having a smartphone or tablet... We needed to figure out how we'd adapt the franchise to that.

One of the key blockers was Desmond. He was a great strength at the beginning, because he was the thing tying all the instalments into a coherent meta-story, but now we really want you to be the present-day hero. Because by putting you directly in the middle of our universe, we're not telling the story of somebody else; we're allowing you to express yourself in our universe. The idea of Abstergo Entertainment and you playing a researcher there is that we're telling you that you're not alone in searching for Edward Kenway's memories. The more colleagues you have, the more we as designers can benefit from those connections. This is just preparing the franchise to develop some new gameplay and new narratives in the future.

"That's the first promise we need to respect: bring them some fun and don't be shy about bringing humour back"



In the Abstergo Entertainment portions, it feels like you're experiencing a doppelganger of Ubisoft Montreal. Why adopt such a meta approach?
This is something we find interesting as a way of making us closer to our audience. Having Abstergo Entertainment, and saying it's developing entertainment products through entertainment devices, allows us to create something like a Russian nesting doll – a dream within a dream. It's a reflection on us as developers, so some of the content is reflecting on life and the realities of the game industry in big studios in general.

Songwriters can write songs about life on the road, but game developers aren't usually free to reflect on their craft in such an explicit fashion.
We think it's one of the beauties of the franchise and specifically this modern-day layer. It's been a smaller facet of the game, but it's one players really care about. It allows us to develop some stuff that we couldn't develop within the main experience in the past. For me, it was a pleasure to give Darby [McDevitt] the opportunity to write an audio drama about interviewing one of the first subjects of the Animus programme about what it felt like to relive a woman's memories.

***Black Flag* is more humorous than previous games, especially scenarios involving Stede Bonnet, a wealthy landowner playing at the pirate life. Were you trying to adopt a more light-hearted tone?**
One of the things I said to the team was, "Look, we're the sixth instalment [and] there were five other games before. And they did great things, so we need to learn from them, [but] at the same time, let's not take this too seriously. We're just developers creating entertainment for people. We're working for somebody else, who will pay a significant amount of money, and they deserve to have fun. That's the first promise we need to respect: bring them some fun and don't be shy about bringing some humour back. But just because we're bringing back some lightness and humour, that doesn't mean we're not taking our work seriously." ■

Battlefield 4

As far as buzzwords go, 'Levolution' is among the worst. It's *Battlefield 4*'s central gimmick, though, and the natural conclusion to the destructibility introduced in 2008's *Bad Company*. Here, rather than blow neat holes in walls or knock down the odd house, you can destroy set-piece structures on every single one of the game's multiplayer maps.

Given its prominence in EA's promotional campaign, it's little surprise to find that Siege Of Shanghai is the most dramatic map of the lot, featuring a towering skyscraper that can be felled by crippling its supports, which forces any players inside to parachute to safety as it lurches to the ground. In Flood Zone, a burst levee turns streets into water-filled canals, while Rogue Transmission's colossal radio telescope tumbles apart.

Paracel Storm is our favourite level, set on islands beset by a tropical squall that grows increasingly violent as the round progresses. As the storm intensifies, the waves get choppier, hampering water vehicle handling. A huge ship moored to a wind turbine will break free if its tether is destroyed by either you or the storm, shifting a capture point. In one game, we lost a dogfight and ended up in the waves below, only to see our pursuer slam into the turbine, setting the ship free.

These moments are undeniably among 2013's most striking visual spectacles in gaming, but they are novelties, and grow old quickly. *Battlefield 4*'s biggest, most exhilarating moments have nothing to do with scripted destruction, but are born from the sheer chaos of giving 64 players access to guns, tanks, choppers and jets, and then throwing them all into a sprawling map.

But, swelling player counts aside, that's been the *Battlefield* series' indestructible foundation for a decade, and again DICE proves unwilling to tinker with the formula. Movement feels almost imperceptibly nimbler, but the weapons handle identically to *Battlefield 3*, falling halfway between arcadey snappiness and rattly kickback. In terms of new features, a rudimentary peek-and-lean system has been added, activating whenever you press yourself up against a piece of cover and nudge your crosshair towards its edge. Obliteration, meanwhile, is a fast-paced new mode that combines bomb planting and point capturing.

But the most important new addition is Commander mode. One player per team can occupy the role of commander, viewing the battle from above with a tactical map and issuing orders to attack and defend. If your squad completes an objective, you'll unlock Commander Assets, meaning you can aid your men on the ground with ammo and vehicle drops, or even a UAV that marks the location of enemy infantry for them. There are more direct options, too, including AC-130 and cruise missile strikes. And commanders can view the battlefield through the eyes of their soldiers with a picture-in-picture camera feature. Taken together, it adds an extra tactical layer onto a game that doesn't reward teamwork so much as demand it.

Publisher EA
Developer In-house (DICE)
Format 360, PC (version tested), PS3, PS4, Xbox One
Release Out now

Commander mode adds an extra layer onto a game that doesn't reward teamwork so much as demand it



THRICE BITTEN
Battlefield 4 uses the latest version of the Frostbite engine, which enables wonderfully dynamic environments. Explosions shake nearby trees, waves crest and roll realistically, and that toppling Shanghai skyscraper kicks up a thick cloud of dust that diffuses the sunlight. The engine has also been designed with ease of development in mind, with licensees able to create DICE-level assets much more easily. One example that the studio has given is that designers can, rather than individually animate separate swaying trees, set the direction and intensity of the wind to simulate the result in realtime. Frostbite 3 is going to get plenty of use, powering *Need For Speed: Rivals* as well as DICE's own forthcoming *Mirror's Edge* sequel and *Star Wars: Battlefront* reboot.

Many of *Battlefield 4*'s maps feel notably bigger than those of its predecessors, with a lot more height to exploit; jets scream overhead as players jump from skyscrapers, and tank columns roll through the canyon-like streets below. Even on medium settings, this is a beautiful game. DICE is still self-indulgent when it comes to bloom and god rays, but this hyper-real style makes it stand out from other military shooters.

Multiplayer is the star attraction of any *Battlefield* game, but DICE has once again wasted man-hours on a forgettable campaign. It's the most rote FPS trawl imaginable, but the strength of the visuals and scale of the set-pieces do just enough to hold your interest until the credits roll. It feels like an elaborate tech demo, a way for DICE to show off Frostbite 3's tricks and a decent workout for your graphics card.

You play as Recker, a marine whose squad gets caught up in a war between China and the US. The casting of Michael K Williams – The Wire's Omar Little – gives the script some weight, although it's far from well-written. The campaign's pace is ponderous, and there are too many clumsy instant-fail chase sequences in its six-hour runtime. Its highlight has nothing to do with Frostbite 3's next-gen grunt, either – that honour goes to an amusing deployment of Bonnie Tyler's Total Eclipse Of The Heart.

Battlefield 3's launch was marred by server and balancing issues, and it's the same old story here. As we send this issue to press, there are severe problems with the game's netcode. You'll bury six shots in an opposing player, only for them to spin round and kill you with one. *Battlefield 4* can at least be patched server-side, reducing the need for client updates, but while teething problems are an expected part of any online launch, they're becoming too much of a theme for DICE and publisher EA in general.

Let all the vision-obscuring dust settle and it transpires that *Battlefield 4* is a more conservative sequel than we were led to expect. Neither Commander mode nor Levolution's scripted destructability have changed the feel or flow of multiplayer in any dramatic way. But that's not necessarily a problem: *Battlefield*'s pitched 64-player battles have a rhythm that's still all their own, and the emergent carnage caused when jets, tanks and infantry collide is quite unlike anything else. Its tightly scripted singleplayer game, however, is like everything else, and it sticks in the craw that a tepid story is still sucking up resources when multiplayer has arrived with so many avoidable technical problems. DICE has ironed out kinks in the past, and it is sure to do the same here, but will the studio ever get it right on the first pass?

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ABOVE Frostbite 3's character animation is exceptionally natural-looking, both in online battles and across the short campaign mode. It feels like a generational hop forward, even if far too little else in *Battlefield 4* does

TOP Conquest is still *Battlefield*'s most consistently entertaining and balanced multiplayer mode. The shifting capture points on some maps give it new loci, but the rhythm is still largely unchanged. ABOVE If a teammate is in a vehicle with a spare seat, you can spawn into it from the deployment map. This includes the commander's AC-130 gunship, which can be used to rain fire on the enemy below. RIGHT The scale of the maps can be daunting at first, and it takes a while to learn their geography, especially the streets and rooftops of Flood Zone. Operation Locker is the smallest of the lot, reminding us of *BF3*'s Operation Metro



Call Of Duty: Ghosts

Publisher Activision
Developer In-house (Infinity Ward)
Format 360, PC, PS3, PS4 (tested), Xbox One
Release Out now

An hour or so into *Call Of Duty: Ghosts'* campaign, you rendezvous with a recon team. Its leader, Merrick, turns to you and issues a warning that encapsulates *COD*'s design ethos so perfectly that it might as well be on the box. "You can stick with us," he says. "But you do what I say, when I say it. Understood?"

Of course we do: this is the sixth game of 'follow the grizzled leader' we've played since *Modern Warfare*. But as is traditional, there is a certain amount of change, too. As before, you'll spend much of *Ghosts* in step behind the immaculate shoulders of a gruff marine or three, but you'll also find yourself chasing after the lovingly textured ears of Riley the German Shepherd, on which so much pre-release attention was lavished.

Ghosts' premier marketing device is no mere pup. Stand near it and hold the DualShock 4's Square button and our protagonist pulls up a tablet, which enables you to not only see where Riley is heading but control the hound, too. As Riley, you can sneak through tall grass, with a tap of L1 performing an instant kill up close and a click of the left stick triggering a sprint attack that does the same for faraway foes. It's also a recon drone, barking to get foes' attention, with those in his line of sight tagged for another AI companion's kill. Finally, it takes the place of the standard objective marker, picking up scents and haring off excitedly.

Despite top billing, the dog is far from a permanent presence onscreen, nor is it the narrative's focal point. Instead, the spotlight falls on the Walker family: Elias, the father; Hesh, the elder son; and Logan, the younger brother, through whose eyes you'll see the vast majority of the game. While *Modern Warfare*'s protagonist-hopping has been largely left behind, almost everything else has been brought over, most of it dialled up to ludicrous extremes. Here, the threat isn't Russia, South America or the enemy within, but sort of all three at once, with the weaponisation of space thrown in on top. Mechanically, it's the usual fare, an ADHD blend of stealth and shootouts, plus flight, vehicles and a toybox brimming with near-future tech. The dog, meanwhile, takes on a helicopter and wins. It's thrilling in a dumb sort of way and you've played it half a dozen times already – though this time you'll shoot people in space, under the sea and from behind the controls of a tank with the speed and turning circle of a supercar.

Multiplayer, meanwhile, sports a gently tweaked loadout system; more customisable avatars, including females in a long-overdue series first; and a handful of new killstreaks and gametypes. The killstreaks shift the focus down to Earth, with fewer aerial threats – the trademark Radar is now deployed on the ground – while the gametypes tend to riff off existing modes. Grind is a variation on Kill Confirmed in which dogtags dropped by fallen enemies are banked at one of two points on the map; Hunted is a team deathmatch spiced up by having players start off with pistols and fighting over randomised weapon crates. Maps are more cluttered than ever, another step away from the *COD4* days when every piece of cover was there for a reason. Some cover is dynamic, changing mid-game. Walls collapse and bits of scenery can be moved; shoot a certain tree and it'll fall over, creating a bridge between ledges.

> It's a letdown to discover the only tangible result of PS4's extra processing power is a few sliders being nudged up



Where, then, is all that next-gen power going? It's not in the singleplayer AI, which once again spends the first two-thirds of the game politely shooting you once to let you know where the threat is, and the final hour dropping cooked grenades on your toenails. There are, at least, the green shoots of technical advancement in Squads, a new game mode. You create and level up a team of ten soldiers, with bots controlling teammates when you enter a Squads battle. The AI mimics human behaviour, using online tactics such as drop-shots with none of the headset abuse, and some Squads modes are asynchronous, with your crew levelling while you're offline. The AI's lacking one crucial element of human behaviour, though: once it gets a bead on you, it rarely misses. Tire of the bots and there's a briefly entertaining fourplayer co-op mode, Extinction.

As a game released across generations and running on a modified version of an aged engine, *Ghosts* was never going to be a next-gen showcase, but it's still a letdown to discover the only tangible result of PS4's extra processing power is a few sliders being nudged up. It's a brighter, higher-res version of the same game as ever, and the only sign you're not simply playing a maxed-out PC build of *Black Ops II* is the abundance of particles. Whether it's dust from a crumbling wall, debris fluttering in the aftermath of an explosion or bubbles from a scuba-diving NPC's air tank, you're never far away from a big cloud of something small.

Elsewhere, there is only disappointment in how the next-gen consoles' power has, or rather hasn't, been used. After a plane crash, we skulk through the undergrowth and dispatch an enemy search party. This abundant hi-res foliage doesn't react to our presence at all. Things are even worse on Xbox One, where resolution is dialled down in favour of the series' 60fps tradition and the game runs at 720p. While the PS4 version runs at a native 1080p, that precious framerate drops briefly before checkpoints, which are at least placed so that the odd stutter never affects gunplay. On current-gen consoles, meanwhile, a 12-player cap means the end of the nine-vs-nine Ground War mode.

Many will be satisfied by the simple existence of a *COD* game on the day next-gen hardware launches, but this is a missed opportunity nonetheless. The studio that defined the console FPS in the current generation has declined to do the same here. By the time it gets another chance, it may be too late.

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LEFT Space combat is new and is well implemented, with slain enemies floating around limply. The reload animation is excellent, too – the new clip is spun round in zero-g before being slotted home. BELOW Abseiling sequences have been a *COD* staple since *Modern Warfare 2*'s campaign, but they've never looked better than this nighttime descent down – and ascent up – a Caracas skyscraper. BOTTOM Deep-sea combat plays out much like gunplay does in orbit, though enemies take a few more shots to kill. The level ends in appropriately ludicrous fashion as you stealth-swim your way past a group of circling sharks



RIGHT On current-gen consoles, *Ghosts* holds up well, though it's hard to go back once you've seen it running in 1080p on PS4. The vast majority of sales will, for perhaps the last time, be on 360 and PS3





Batman: Arkham Origins

Publisher Warner Bros
Developer In-house (Montreal)
Format 360, PC, PS3, Wii U
Release Out now

Batman protests when Commissioner Gordon suggests he might be a murderer. "That's not how I do things," he growls. But it *is* how he does things; he's killed three or four people this very Christmas Eve, all because Warner Bros Games Montreal has given him a device that can suspend hoodlums from gargoyles placed just beyond the boundaries of the map. Combined with a Batarang to cut that rope, Batman has been plunging thugs into a bottomless abyss, or if we're still clinging to the fantasy, a 100ft drop onto ice. Developmental carelessness has made Batman a killer.

Batman: Arkham Origins is Warner Bros Montreal's prequel to Rocksteady's *Arkham Asylum* and *City*, set across a younger, less rundown northern Gotham island, which has been rebuilt from Rocksteady's original *City* map, and a southern island that's an entirely new creation. On a frosty Christmas Eve early in his crime-punching career, Batman is hunted by two of his more notorious enemies, Bane and Killer Croc, and six of DC's most forgettable, namely Deadshot, Shiva, Firefly, Electrocutioner, Deathstroke and a sex-changed Copperhead. Bats also has his first encounters with The Riddler, The Joker and James Gordon.

The same carelessness that allows Batman to kill is everywhere in *Origins*. There are impassable boxes at waist height and rooftops you can't grapple onto, with none of Rocksteady's careful signposting via barbed wire or jagged spikes to warn you of their resistance to traversal. The Enigma challenges – proto-Riddler puzzles – are thoughtless throwaway busywork, relying on nothing more complex than Remote Batarang mazes and code-locked doors. Those locked doors, you'll soon realise, are *Origins'* solution to the notion that a linear path might be too dull; there are hundreds of hacking puzzles in the game, and nothing exposes the simplicity of a mechanic more than its overuse. *Origins* crams hundreds of Enigma collectables into its two islands, but each is acquired in mere seconds using methods you've already explored and exploited elsewhere. At no point are you asked to question your toolset or the game's map, unlike in the best of the Riddler challenges in *Asylum* and *City*.

And who knew Rocksteady's combat system was so fragile? A decimal point moved here, a fraction changed there, and the natural rhythm of *City*'s combat breaks down. *Origins'* systems can't be learned as *City*'s could, since the attack timings are inconsistent and the new enemies spoil *City*'s easy rhythms. Perhaps *Origins'* developers sought to make combat more challenging by forcing you to contend with less predictable enemies, but that's missing the point. *Asylum* and *City*'s combat was never hard – after all, you are Batman and you never lose. The question was only how good a Batman you could be.

The game only becomes a bad one by comparison to its predecessors, and City is the cruellest possible mirror



But even mishandled, *Origins'* combat system fights a decent fight. The game only becomes a bad one by comparison to its predecessors, and *City* is the cruellest possible mirror to hold up to *Origins*, exposing its deficiencies by contrast. The new south island, for example, is a lifeless, boring space. Meanwhile, the new tech tree forces its upgrades on you, stealing away options once open to a capable player. In *City*, a skilled Batman could choose combo bonuses over extra armour; here, armour always comes first and the vital weapon-dismantling takedown is an endgame unlock.

The writing rarely provides much justification for chasing the waypoint on your map ("A drone?" Batman asks. "Only The Penguin would have this technology." It's the first of many logical leaps). The voice cast has changed almost entirely for the worse, too, and the humour found throughout Rocksteady's dark worlds is absent. The story mission locations are almost terminally linear and key story moments are wasted: a villain's attack on the Batcave happens off-camera, while the end creeps up on you like, well, Batman. You'll never see it coming until you're dangling from a gargoyle watching the credits roll.

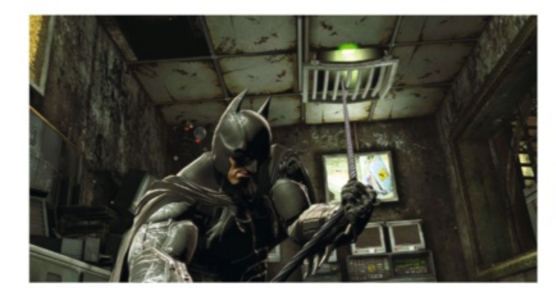
The art design is no better, making a poor case for any of DC's most forgettable villains to become unforgettable, or for the styleless world to be worth exploring. And at the time of review, the game is buggy to the point that the AI routinely turns off, button prompts fail to appear and PC players have been forced to exploit one bug to bypass another.

Still, *Origins* is built on such strong foundations that the carelessness making Batman a killer can't kill Batman. The parts that do work – Batman's gadgets, the Invisible Predator stealth rooms, swooping and gliding with your cape – are all impeccable pieces of design lifted from Rocksteady's original template. And we wouldn't say Warner Bros Montreal has contributed nothing. One or two of *Origins'* Predator challenge rooms are among the series' best, and integrating the Predator and Combat challenges into the campaign only improves the game. *Origins'* new Detective Mode is well designed, too, even if Batman does the bulk of the detective work while you follow aggressive prompts.

There's a good game here, but that game was built and finished two years ago. *Origins* adds little to its mechanics and nothing to the mythology. The story of a raw and inelegant Batman in his early years is better told on the big screen and the printed page, rather than in a raw, inelegant game in a generation's twilight years.

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RIGHT Batman begins *Origins* with most of his *Asylum* gadgets in place, but picks up a Remote Claw and Glue Grenade, which are a grossly overpowered version of the Line Launcher and a cynical version of the Freeze Grenade







ABOVE WB Montreal has done little to alter Batman's Detective Vision or how the stealth rooms play out – it feels like Rocksteady's work, either by careful replication, or because Montreal was handed the kind of code that it didn't receive when building the combat system. **LEFT** The Christmas Eve setting is squandered, with only a handful of mentions, limited dressing and just the occasional clang of a bell in the air. Still, the storm ravaging Gotham makes for a neat excuse as to why the streets are so empty

BELOW The boss fights are largely straightforward, with only Bane's erratic rushes causing trouble. Firefly fights a great deal like Poison Ivy in *Arkham Asylum* – another instance of WB Montreal not fixing something that worked



The Legend Of Zelda: A Link Between Worlds

Zelda's legend is destined to repeat, bringing to mind Elizabeth's deterministic revelation in *Bioshock Infinite*. There's always a boy, a girl and a pig demon. There are always three magic triangles. There's always chicken abuse. *A Link Between Worlds* brings Nintendo's cyclical ideas to their natural destination, revisiting the Hyrule purged of evil in *A Link To The Past*. Enough time has passed for the events of that game to enter legend – retold in a fetching castle mural – but the land is as we left it in 1992.

What role does well-trodden ground have in a series trading on the thrill of discovery? Well, Nintendo toys with your memories, sticking to *ALTTP*'s rough shape only to diverge in surprising ways. Within minutes, we're back beneath the Sanctuary, dicing up rats and agonising over booby-trapped switches, only for a strange antagonist – a giggling art aficionado with a touch of *Skyward Sword*'s Ghirahim about him – to burst onto the scene and remind you that the world is no longer familiar. But part of the fun is seeing what's made the cut, finding out if the creepy hobo still lurks beneath the castle bridge, for instance. And unfamiliar sights lurk in Dark World replacement Lorule, accessed via dimensional rifts torn in various surfaces that Link can enter using his new wall painting form.

ALBW has the air of a foggy recollection, a story that, thanks to improved host hardware, becomes exaggerated in the retelling. Link now moves with an analogue grace far beyond his 16bit self, welcoming dexterity challenges that have him weaving past projectiles, or in one of the many excellent minigames, dodging a barrage of angry Cuccos. 3DS's speakers pump out glorious orchestrations of classic themes; expect to spend a fortune on the Milk Bar buskers' folksy covers of iconic ditties. That *ALBW* runs at 60fps lends it a fluid physicality, countering the simple geometry that renders it crude when seen in stills.

And then you push the depth slider up. As *Skyward Sword* showcased motion controls, so *ALBW* flaunts stereoscopic 3D as both a tool for superficial silliness – watching a plummeting beetle become a tiny speck, for example – and for helping eyes perceive height. The effect complements Link's new ability to become living graffiti and merge into walls, allowing him to skitter along unbroken horizontal lines and then re-emerge on distant platforms. The game's perfectly playable in 2D – wouldn't want to alienate all those 2DS owners – but it's far easier to grasp in 3D.

Such power awakens the deviously logical Nintendo mindset that gave us *Ocarina Of Time*'s Water Temple and the Eagle's Tower in *Link's Awakening*. Success relies on comprehending and commanding knotty 3D spaces: launching into a wall run at the right height, deducing the relationship between floors layered below or above each other (easier thanks to touchscreen map), or

Publisher Nintendo
Developer In-house
Format 3DS
Release November 22

That it runs at 60fps lends it a fluid physicality, countering the simple geometry that renders it crude when seen in stills



wielding items with the ability to raise sandy platforms or yank Link skyward with a spin of a propeller. This is a game of heights and distances, although *ALBW*'s creators are not unwilling to throw in playful riffs on light and shadow or hot and cold as well. The latter are powered by various elemental rods, items that have been noticeably absent in Link's big-screen adventures.

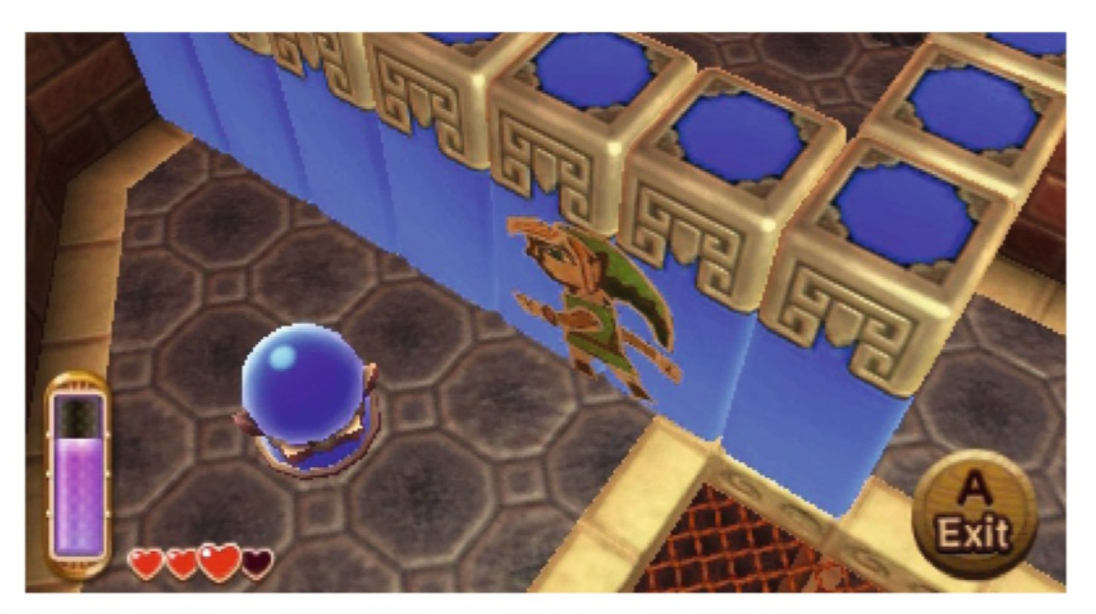
As a piece of traditional *Zelda* design, *ALBW* walks the line between punchy portability and chewier fare. One-button combat and a top-down perspective lends it arcadey zip – tearing up Hyrule with the Pegasus Boots is a giddy delight – but its map is also riddled with treasure caves, a set of miniaturised dungeons designed to test your grasp of an individual item. The resulting Hyrule is more artificial playpen than fleshed-out world, though even this has its charms. Shorn of *Zelda*'s epic bloat, there's a better sense of hero making, with defensive tunics and tempered blades transforming Link into a tank over 14 hours. It reminds us what a romp *Zelda* used to be.

So alien is the 2D rhythm that *ALBW*'s potentially revolutionary idea – the option to tackle dungeons in any order – can get lost in the noise. Sequential gear gating, wherein each gauntlet of puzzles and combat offers up the item required to unlock the next, is replaced by an item rental service. Raise the rupees and Link's entire arsenal is yours within four hours. The shop itself is a poor vehicle for the concept, however. Rentals are the cheaper option, but retrieved upon death, though such is the generosity applied to hearts that this only happened to us once. The alternative is to buy outright, but the ostensibly 'extortionate' prices are nothing in a world where people use bushes as banks.

Nintendo's nervousness around punishment, for fear of putting off newcomers, continues to undermine *ALBW*'s attempts at novelty. Why scavenge for potion ingredients or upgrade weapons with Maiamai babies when the quest is perfectly suited to a base-level Link? Redundant ideas don't spoil the journey, but they do cloud Nintendo's true achievement: balancing a player-led adventure and building obstacles to satisfy an infinite variety of Links. The inability to predict what gadgets we'll bring into every dungeon proves to be a boon, forcing their architects to drop well-rehearsed routines in favour of genuine surprises. Even the trusty old hookshot has something new to say.

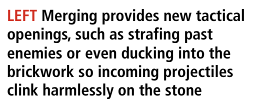
But it is one voice in a game of many, an adventure that simultaneously channels nostalgia for a certain place, a taste for a perspective and an eye for harnessing Nintendo's idiosyncratic platforms. Are there too many variables to draw valid conclusions from the game's experiments with *Zelda*'s form? Perhaps not – at least the Hyrule of old acts as a safety net while Nintendo performs its fan-defying acts above.

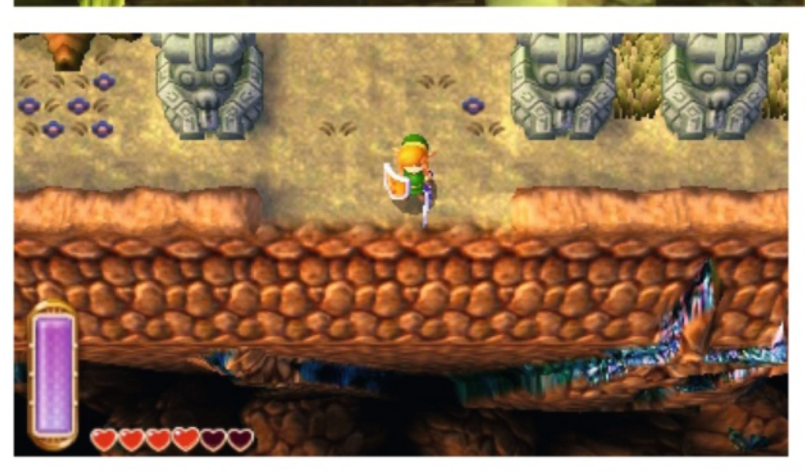
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ABOVE Link's flattened form is like a proto-*Wind Waker*, his flickering chalky edges bringing to mind a living cave painting. Neatly, his current kit selection is represented, be it in the colour of his tunic or a tiny lantern swinging from his belt




LEFT Merging provides new tactical openings, such as strafing past enemies or even ducking into the brickwork so incoming projectiles clink harmlessly on the stone





ABOVE *A Link Between World*'s dungeons unfold like echoes of their *Link To The Past* forebears. The same enemy types live in them, some of the puzzle mechanics are borrowed, and many bosses take the same form, if not the attack patterns and solutions, which is sure to throw returning adventurers. **LEFT** Stereoscopic 3D helps Nintendo do a fine line in bottomless pits, although its habit of hiding secrets on lower levels does instil a lemming-like impulse to throw Link into every glowing ravine you happen across

Tearaway

Gosh, we're sorry. Something's rotten in the state of Valleyfold and it's all our fault. Mischievous creatures called Scraps have infested this papercraft land, spilling out of a hole in the sun and running amok, terrorising the inhabitants. This tear in the solar fabric leads to another dimension, the Scraps charging forth from the void in between, and the culprit's up there in the screen's top corner, smiling curiously down at the paper people below. It's us, our face captured by Vita's front camera. We dispatch the first of many Scraps by jabbing our fingers at the rear touch panel, a polygonal digit bursting from the ground and knocking our enemies into the air, the fabric of our jeans just visible around its edges. It's taken almost two years, but someone's made convincing use of Vita's swollen featureset. Naturally, it's Media Molecule.

It doesn't end there, either. Front touch is also used to fine effect to open a pair of stage-front curtains, uncurl reels of paper to form platforms, and pull apart ribbon bows to open the presents that litter this varied land. Switching between two touch panels takes some getting used to – this is, after all, a brand-new way to play – but the visual design helps us along. Objects that use rear touch have a matte surface plastered with little PlayStation symbols, just like Vita's back panel. Those that require a digit on Vita's OLED screen have a gloss surface covered in glistening thumbprints.

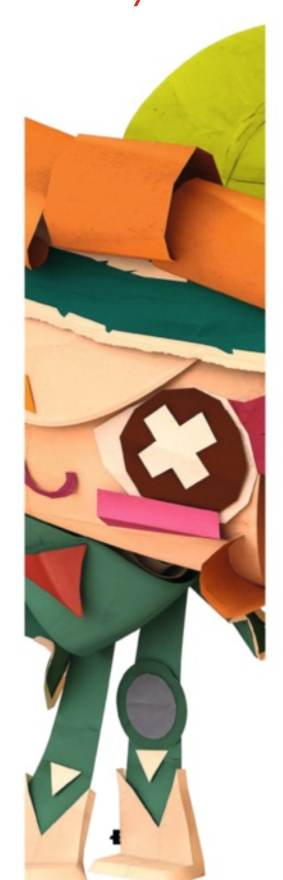
Even Vita's two cameras are put to wonderful use, the action pausing frequently to ask us to take a picture of something in the game or the real world, the former using a camera given to envelope-headed protagonist Iota (or Atoi, if you play as a girl) early on. It's a flexible thing, aimed with either the right stick or Vita's gyroscope. An array of lenses and Instagram-style filters are available for your cameras, purchased using Confetti, the game's principal collectible and currency. An elk with low self-esteem begs for a splash of colour and we oblige, a close-up snap of our sofa through the Cooling filter decking it out in icy blue corduroy.

We take selfies, both of ourselves and Iota, with our mug plastered on posters and the land's new-look sun. We record noises on demand, giving voice to a pumpkin-headed scarecrow, our booming "hello" echoing back at us as we navigate a sequence of tiny platforms across a late-game canyon. The Scraps have left some creatures and objects completely colourless, but a photo restores their vivid splendour, and you also unlock a papercraft pattern to print off from the game's website. Pause the game and, behind a layer of menus, the screen is a window on the real world.

Tearaway is a game that blurs the lines between real and virtual, one that takes to dizzying new heights the concept of putting the player in the game. The cutting mat might be the highest of the lot. You'll encounter it first when the king of a local squirrel colony has lost its crown and asks you to make a replacement. You select a square of coloured paper, tap the pencil icon, and set to work against a jaunty ukelele soundtrack. Tap the scissor icon and it will cut along the dotted line you've drawn, then you drag the waste paper off to the side. After that, the squirrel asks for jewels. We're no master jeweller at the best of times, least of all when drawing with an adult index finger, but when our ramshackle creation appears in the game, it somehow fits. The effect is striking. We made that.

Publisher SCEE
Developer Media Molecule
Format Vita
Release November 22

Tearaway's world may be made of dead matter, but it ripples with life from the minute you set foot in Valleyfold



Yet even without our input, *Tearaway*'s world is beautiful. Screenshots can only tell you so much – they can't show you the way that waves are made of sheets of paper that unfurl like party streamers. They can't convey the sticky inertia of setting foot on the brushed swirls of glue that let you walk up walls, the wavy sway of parchment plant life, or the way fabric tears as you drag your finger along the rear touch panel to bring a distant platform within reach. *Tearaway*'s world may be made of dead matter, but it ripples with life from the minute you first set foot in Valleyfold right through to the end, when Iota's journey to your solar throne completes and the two of you are rewarded with one of the sweetest closing sequences you'll have seen in years.

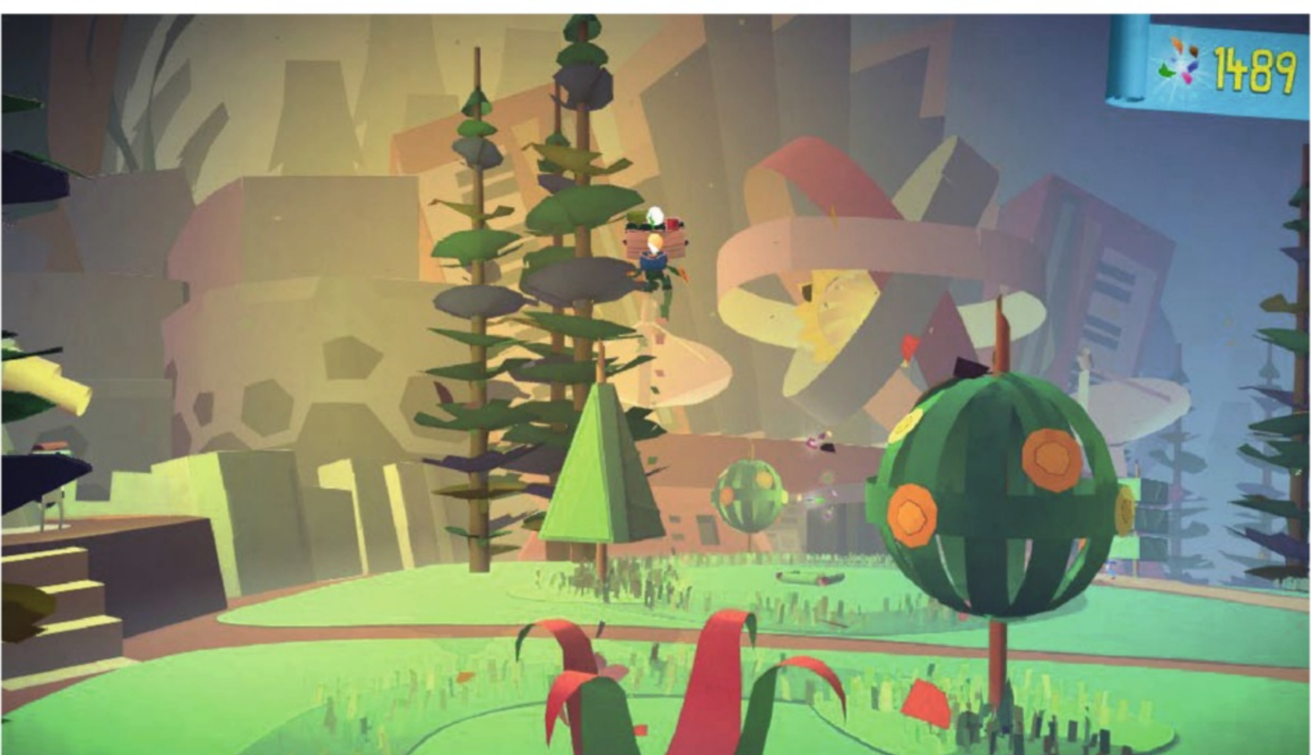
It's gracefully paced, too, with Iota's moveset starting out so simple that he doesn't even have a jump. He'll get one soon enough, then learn to curl up into a ball to pass through small gaps. Later he'll lay hands on the Weaponised Squeezebox, a concertina with a hole in it that wheezes comically as it hoovers up enemies and blows breezes at paper windmills. The Scraps learn a few tricks of their own in response, some sitting high on stilts and gobbing spitballs, others sprouting wings.

Yet while Iota's moveset is simple and checkpointing is generous in the extreme – fail a platforming section and you'll often be deposited on safe ground at the end of it – this is far from an easy journey. It is a game of nimble dexterity rather than fast reflexes, and late on, when you're juggling front and rear touch with tilt and traditional controls, it feels quite unlike anything else.

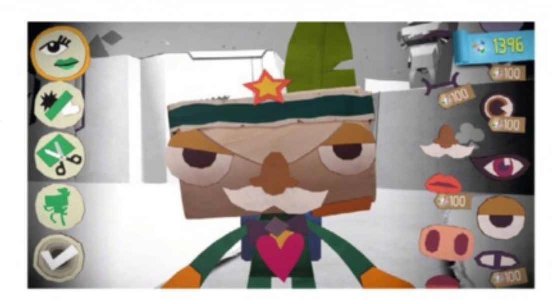
At six to seven hours, *Tearaway* isn't the longest game in Vita's library, but it packs in more joyfully realised ideas than many games manage in three or four times the runtime. It's a beautiful, brilliant game, but it's more than that: it's the first great Vita game, using the console's gimmicky featureset – its gyroscopes, cameras, touch panels and microphone – to make something that wouldn't be possible on any other system. It's a game that refixes Media Molecule as the misshapen jewel in Sony's wonkily sketched crown, one that shows immersion isn't about story or spectacle but the simple pleasure of play. And throughout it all there's you, up in the sky, gazing benevolently down from the sun, the smile on your face forever unbroken. **9**

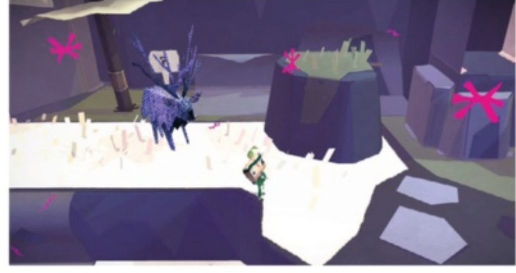


LEFT While early use of rear touch focuses on combat, it quickly becomes a key puzzle-solving tool. Here a simultaneous double-poke will push a tree trunk into the sky, giving Iota or Atoi a split second to run underneath to the other side. **BELOW** If UK tax breaks ever become reality, Media Molecule would pass the cultural test with ease. This is a thoroughly British game, and not just in its voice cast: a series of grimy garage basslines underpin its jaunty soundtrack. **BOTTOM** Your influence on the game world is profound. This elk's pattern came from some **Edge** upholstery, for instance, with a nearby cushion recolouring a late-game pig. And, yes, those are supposed to be snowflakes



RIGHT Confetti buys you new camera lenses and filters, but it also powers *LittleBigPlanet*-style customisation. A host of ready-made facial features and props are on offer, or you can choose to make your own on the cutting board





The Stanley Parable

This ground-up remake of the cult *Half-Life 2* mod expands *The Stanley Parable* in a dozen directions without altering its fundamentals. You are Stanley, or someone rather like him, an office worker whose job pushing buttons on command makes him happy until the day those commands abruptly stop. Leaving his desk to investigate, his subsequent actions are directed by a plummy narrator who guides him through the office facility and beyond to discover the truth. Alternatively, your actions are commented on, objected to or encouraged by a plummy game designer whose attempt to tell a straightforward story is derailed by the tricky agency of the person pushing the buttons.

The Stanley Parable is a game about walking from A to B that acknowledges the existence of the rest of the alphabet. As you approach a pair of doors, the narrator will indicate that Stanley takes the left one. Whether you do, and how you decide to follow up your revolt or acquiescence, tilts the game towards wildly different conclusions. A playthrough may only take minutes, but *The Stanley Parable* places you in a vast branching maze of choices that will take hours to map out.

Certain endings are discovered by following whichever critical path you settle on. A few are secreted away as jokes or Easter eggs, and may be stumbled upon by accident or treated as puzzles to be solved over multiple attempts. The most surprising are those that come when you 'break' the game by ducking into somewhere you shouldn't be. Galactic Cafe's attention to detail is astonishing, and when the narrator chimes in on what you've just done, the result is something like the payoff to a magic trick. There is little you can do that the developer hasn't prepared for.

This responsiveness gives *The Stanley Parable* a sense of life that few games achieve. The relationship between player and designer is played out in realtime as a lively argument. And because *The Stanley Parable* is a dialogue, it feels far less didactic than a game about game design otherwise might. It is fun, even as it acknowledges that fun can be one of the most insipid concepts in a developer's toolbox.

Moreover, *The Stanley Parable* is brave. It's brave because it offers the freedom to define the parameters of your experience. It's brave because it's willing to explore the ways in which games manipulate players, and to extrapolate that point into a discussion of the way we are all manipulated by the structures of real life. It's brave because it's willing to make fun of itself. Are you interested in game design? Play it. Did you enjoy *Portal*'s sense of humour? Play it. Are you David Cage? Please, please play it.

9

Publisher Galactic Cafe
Developer In-house
Format PC
Release Out now



CRITICAL PATH
There is no correct way to play this game, or right order in which to discover its endings. That said, what you encounter and when will impact the tone of later playthroughs. The paths through the game provide context for one another and it is your aggregate experience that has lasting meaning. This amounts to something remarkable: an authored game where players experience the same events differently depending on their choices.

Perspective tricks are used throughout the game to disorient the player. Corridors shift, doors vanish and corners can loop back on themselves – there's a clear line of surrealism running through *The Stanley Parable*



Puzzle & Dragons

Publisher/developer GungHo Online Entertainment
Format Android, iOS
Release Out now

GungHo's F2P monster is a Gojira-sized phenomenon in Japan, and that's no surprise when you consider its ingredients. It's a match-three dungeon crawler with the immediacy of *Bejeweled*, the collectable monsters of *Pokémon*, the propulsive force of RPG-like progression, and an irresistible social component designed for maximum viral impact.

You begin with a single creature from one of five elemental types. Enter a dungeon and you'll battle groups of beasts by matching orbs of the same alignment. Further matches made in a single turn boost your attack multiplier, and you can also line up heart icons to replenish health. Defeated enemies may drop an egg, potentially adding a new member to your monster squad.

It's a simple setup that belies systems of real tactical depth. You can move orbs anywhere on the board, and smart players will take turns to line up chains, soaking up hits before unleashing combo attacks to remove a group in a single turn. Each trip sees you recruit an ally from another online player, which can be used to fill elemental gaps in your squad, or for buffs to health or attack power. Either way, you'll both earn points for teaming up, which can – and will – be spent on fresh additions to your growing roster.

There's little new here, but it's intelligently assembled, uncommonly generous and habit-forming. It's a healthier type of addiction than a certain candy-based alternative, but if you can't afford to lose hours of your day, then consider this fair warning.

7



Marvel Puzzle Quest: Dark Reign

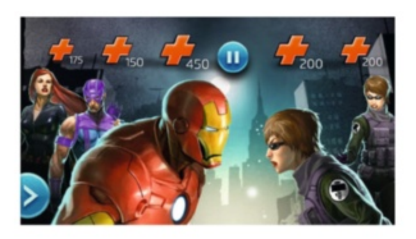
Publisher/developer D3Publisher
Format Android, iOS
Release Out now

The most irritating tropes of freemium design are present in this comic-book take on D3Publisher's match-three puzzler. There's an energy system that forces you to either wait until a character has healed or send them into battle with a depleted HP bar. After each fight, you'll be nagged to spend to increase the size of your comic-book collection in order to have more characters for selection.

And yet you'd be wrong to write off *Dark Reign*. This is the rare F2P game that's balanced well enough to ensure you'll rarely feel the need to put your hand in your pocket. Early stages are easy enough to give newcomers a feel for the mechanics, while skilful players will earn plenty of the Iso-8 currency needed to level up their superhero squad. By the time the challenge increases, most will have four or five heroes to choose from, alleviating the need to spend healing points after every battle. With bonus characters joining your team at certain story stages, injured parties will have plenty of time to recover, while PvP battles and tournaments give you ample opportunity to boost your supplies.

The core game is as irresistible as ever, and *Dark Reign* introduces a few wrinkles: you might need to remove tiles before snipers can fire off deadly shots, or make a specific match in order to protect a character with low energy. Meanwhile, a witty, self-referential script moves the story briskly onward. It lacks the original's elegance, but as F2P spinoffs go, this isn't nearly as villainous as you might expect.

7



Duet

Publisher/Developer Kumobius
Format iOS
Release Out now

Duet is deceptively straightforward. The player controls two balls – one blue, one red – which sit opposite each other on a circle. Levels are comprised of sets of falling blocks, and your task is to navigate the balls around these obstacles by spinning the circle left and right, swinging one and then the other out of the way.

Straightforward, yes, but not easy. Touching any block spells death, your ball bursting and leaving a grisly blue or red stain that persists through your next try and the many that follow. Some levels you might complete first time – some with quick reflexes, most with luck – but many more will end coated with the splattered evidence of your continual failure.

As you advance through the mercifully short levels, the game begins dropping harder and harder obstacles in your way: blocks that hide other blocks, blocks that spin and blocks that fall at different speeds. Which equals more collisions, more restarts, and more paint splatters. But for all the punishment it inflicts, *Duet* never feels unfair – when you fail, it's your own sluggish reflexes and prodding fingers you'll be cursing.

That balance is key. A stupid mistake on the first block is annoying, a fatal slip on the last is hateful, but that makes pirouetting through a level unscathed, even on your 20th attempt, feel like a hard-won achievement. And the final rush of snatching victory does much to make up for the futile, paint-spattered rage that preceded it.

6



create

Lifting the lid on the art, science and business of making games

This issue's People, Places, Things gets underway on p108, where we talk to the revered Shinji Mikami, creator of the *Resident Evil* series, about setting up his new studio, Tango Gameworks; his return to survival horror with *The Evil Within;* and his desire to nurture the next generation of Japanese game designers. On p110, we step into *The Legend Of Zelda*'s memorable forest maze, The Lost Woods, and consider its seemingly endless influence on labyrinths across the gaming landscape. On p112, we attempt to pry open the Poké Ball and debate the ethics of the monster trap that so effortlessly captured our imaginations. In our Studio Profile on p114, we speak to Czech game studio Amanita Design about how it relentlessly follows its vision to make old-school point-and-click adventures that brim with life. Then The Making Of… on p118 lays out the plan behind Mode 7's *Frozen Synapse*, a niche tactical combat simulation built on the lessons of past failure. As usual, our columnists have the final say, with Tadhg Kelly (p122) rolling time back to his tabletop days to deliver the lessons of traditional RPGs. Clint Hocking (p124) reflects on the power that game developers have to alter the psychology of players through their work and the responsibility this places on the shoulders of creators. Finally, James Leach (p126) discusses why games involving moral choices usually inspire us to pursue extremes, because it's no fun to roleplay an average person, yet also discovers an interactive fiction engine that nails the polite middle ground.



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Pokémon has layered plenty on top of its core ideas, most recently Mega Evolutions. But the humble Poké Ball – probed on p112 – is still a mystery

People

SHINJI MIKAMI

Fear him: the father of survival horror is bringing fresh terror to games

Mikami recognises where the *Resident Evil* series has gone astray, so *The Evil Within* is ditching "boring" QTEs and copious gunplay to focus on scaring you witless

Three years have passed since **Shinji Mikami** set up Tango Gameworks. While the studio has yet to release a game, news of its current project, *The Evil Within* (AKA *Psychobreak*), is sending shivers of fear across the world. The game represents Mikami's return to the survival horror genre he created with *Resident Evil* in the mid-'90s, and revolutionised in 2005 with *Resident Evil 4*. So what's different now?

"Not much has changed when it comes to instilling terror in the player," Mikami says. "But people have got used to the tropes of horror and they know what's coming next, so in that sense it is harder to make them afraid."

That's the reason you will be made so powerless in *The Evil Within*. Scarce ammo, confined spaces, near-invincible enemies that necessitate lots of running and hiding: it's a world designed create an air of tension and make you dread conflict. Mikami himself, however, is becoming less tense now the game is creeping inexorably closer to its 2014 release date.

"It's still difficult to manage a team, but things are coming together now that the game is in a playable state. So, compared with a couple of years ago, it's easier," he tells us in a hotel suite near a packed Tokyo Game Show 2013, where *The Evil Within* is currently on display in the form of an extended theatrical trailer. "Making games is always like a rollercoaster: really fun times, but also really busy times. When you ride a rollercoaster, the uphill part is scary and fraught and lasts for a long time, and the downhill part – the fun, exhilarating part – is over in a flash."

At least he's free of the frustrations of working within a big organisation; he certainly feels more comfortable heading a closer-knit team at Tango. As leader of ZeniMax's only Japan-based studio, he also says he enjoys a good balance between autonomy and being a part of a bigger company with a vast talent pool.

"We still feel a strong spirit of independence," he says. "Bethesda respects creative people and creative freedom, so in that sense it is an ideal group to be a part of. And if we want to learn technical knowhow from another studio, they are all very open."

One way Mikami wants to grow Tango is to pass on the things he has learned to a new generation. This is a hot topic in Japan at the moment, where the management at major game companies can go unchanged for decades. Keiji Inafune, another Capcom alumnus, has set up his own Inafune Academy, a special school of game design, to train new faces. And Namco Bandai executive VP Shin Unozawa pleaded for young game designers to shove their bosses out of the way during his keynote at TGS 2012.

"One thing I want to focus on is to nurture younger staff, and I think now is the right time to do that," Mikami says, although he also notes that it might take Tango five to ten years to create a really strong team.

In the meantime, he has to maintain a fragile balance between giving his workers space to grow and shaping his games. "The most important thing for building motivation is to let them do the work they want to do," he says. "But the disadvantage of that approach is that if everyone's doing what they want, the game becomes inconsistent. To find the balance, you must watch what they're doing carefully and check their progress, while not forcing them to do something they don't want to do. We haven't quite got there yet. Probably on the next title I'll have to be stricter to maintain that balance."

"People have got used to the tropes of horror, so in that sense it is harder to make them afraid"

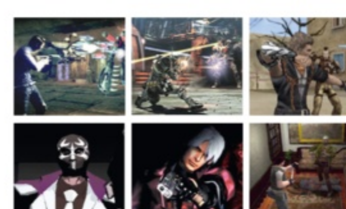
Mikami singles out three of Tango's staff as future directors: apprentice game director Ikumi Nakamura, who worked on *Bayonetta*; art director Naoki Kataki; and design lead Shigenori Nishikawa, who directed *Mad World*. "If people with character as strong as those three work together, there will be no arguments!" he laughs. "So in future I hope they will each have their own projects. But Tango is still a new studio and it has yet to establish its colours, so it will take time. I hope to find small projects to entrust to each of them soon – small games like *Journey*."

Mikami indicated even before *The Evil Within* was announced that his next game could be his last. His interest in breeding new talent was a key reason for founding Tango, and he was worried that he would have to spend more time managing and away from the director's chair as the studio grew. But now, a couple of years later, he says he has no intention of stepping back from game development.

"I don't think I'll ever completely stop doing creative work," he says. "We're a studio that makes things, and that means we need a leader who also makes things. So I don't think I'll be taking my hands off the wheel completely. I want to give younger staff the chance to make games – that's something I'm very passionate about – but I'm not sick of making games or anything. I want to continue in a creative role. That will never change."

CV

URL www.tangogameworks.com
Selected softography *Shadows Of The Damned* (2011), *Vanquish* (2010), *God Hand* (2006), *Killer7* (2005), *Devil May Cry* (2001), *Resident Evil* (1996)



His duties at Tango might widen the gaps between his games, however. *The Evil Within* is Mikami's first game since 2011's *Shadows Of The Damned*, an ill-fated horror-comedy produced in collaboration with *No More Heroes* director Goichi 'Suda51' Suda, with whom Mikami had previously made *Killer7*. *Shadows Of The Damned* was hampered by creative differences between its developer and publisher, and failed to find mainstream success.

The Evil Within looks to be much more serious in tone, and perhaps the most disturbing Mikami game to date. Protagonist Sebastian Castellanos, a cop investigating mysterious goings-on at a blood-soaked mental hospital, is all too human. For instance, an early section of the game sees him limping painfully after being attacked by a deranged butcher with a chainsaw. You are not a superman in this game. Play incautiously and you'll be a dead man.

But Mikami is right about the tools of horror having not changed much in the last few decades: Castellanos will have to contend with several horror staples, including corpses hanging from the ceiling, giant spider-lady monsters, and human-looking wretches covered in spikes and barbed wire. And while you will be able to use traps placed around each stage to your advantage, you could just as easily fall foul of them. Seeing rows of spinning blades close in on both sides of the gigantic wraparound screen at TGS did not have a calming effect on onlookers.

"The scariest parts will be when you encounter enemies that cannot be killed with a gun," Mikami grins. "Even if you shoot them they won't die, so you'll have to run or use a trap to beat them. That should be fun – and also scary." ■



Places

THE LOST WOODS

How Zelda's enchanted groves inspired a forest of puzzling mazes

A Link To The Past codifies a maze that had once been abstract. But it presents another puzzle: to find the Master Sword in a swirling miasma of mist and from among its flimsy decoys

From *The Legend Of Zelda*
Developer Nintendo
Origin Japan
Debut 1986

You could date the underpinnings of the concept back to text-based adventures ("You are in a maze of twisty little passages, all alike") or to the randomly generated environments of ASCII roguelikes, but the definitive impossible maze appears in the original *Legend Of Zelda*. Link finds himself contemplating two perpendicular paths that intersect amid impenetrable ranks of brown trees. If he has paid an elderly woman for advice, he'll know that following the paths north, then west, then south, then west again will deliver him out of the forest and into the graveyard beyond. If he has not, there's no telling how long he might wander, returning again and again to the same eerily familiar screen. This hellish Groundhog Day scenario was especially daunting in 1986, before the solution lay but a few keystrokes away.

The graveyard, where ghosts will harass Link if he bumps into their headstones, is candidly supernatural. But the abutting Lost Woods – as the Forest Of Maze from the shakily translated original *Zelda* came to be known throughout the series – sit at a threshold between the mundane and the magical, the symbolic and the figurative. Are they a metaphor, a clever way for programmers with limited resources to capture the feeling of being lost in a vast forest without having to render all that vastness? Or are they to be taken literally, implying that the woods are under a space-warping enchantment? Such rich narrative and imaginative roots would inspire several imitations, becoming a staple of fantasy adventure games of the time.

As games grew more spatially and narratively complex, the Lost Woods followed suit. In *A Link To The Past*, they're more like a straightforward maze, with green tress shrouded in a disorienting fog. *Ocarina Of Time*'s version returned to something closer to the original puzzle, although this time around they were seeded with hints to aid orienteers. Each screen has some distinguishing feature, and subtle lights inside the tree-trunk tunnels indicate whether a path leads farther into or out of the Woods. The task also started getting papered over by a more robust fiction: anyone who wanders for too long in the Lost Woods turns into a Skull Kid, a Stalfos or, according to *Four Swords Adventures*, a Deku Scrub. Any ambiguity over whether the Lost Woods were mirror or magic was gradually dispelled, but the goal – to find the true path through confusingly similar terrain – stayed intact.



The Tomb Of The Unknown King from *FFVIII* confuses with its perspective shifts, but doesn't repeat like the original Lost Woods

The idea of game space as an Escherian construct that moves in impossible circuits has also played a role in the *Mario* series, *Zelda*'s august foil, since its very first game. Several levels in *Super Mario Bros* force you to guess the correct path branch or warp pipe in order to proceed. And all of the obvious exits in *Super Mario World*'s Forest Of Illusion are as substantial as its name suggests. Variations on the theme appear in *Paper Mario 64*'s Forever Forest and *Super Mario RPG*'s Forest Maze, too. In the latter, you can abandon chasing Geno to follow a series of arcane cardinal directions to find a secret area. Rather than confined spaces, these takes on the Lost Woods are entwined with regular gameplay, and can verge on the point where a fun challenge tilts into a frustrating ordeal.

Since there is no manual dexterity involved in getting through them, they rely on our spirit of exploration

Not all Lost Woods are created equal. One of the best variants appears in *Breath Of Fire III*, where corridors through trees are replaced by a wide-open desert, an apt but underexplored place to get lost. A wrong turn on the invisible path triggers the player running out of water and teleporting back to town. But with a clever star-navigation system in place, it feels enchanting and challenging rather than hopeless.

The same cannot always be said for the *Final Fantasy* series, which includes some of the most galling Lost Woods-inspired mazes ever. Still, its creators brought some new ideas to the concept: get lost in the endless desert near the Gold Saucer and you have to wait for a Chocobo carriage to pick you up and take you back to Corel Prison, while leaving a trail of flags in your wake can help you pass through the perspective-swivelling snowy wasteland of the Great Glacier. On the more frustrating end, the first screen of the Sleeping Forest repeats indefinitely if you have neglected to exhume the Lunar Harp, while the Tomb Of The Unknown King achieves the disorienting effect of a Lost Woods via confusing changes in viewpoint rather than level layout.

The Lost Woods concept has been affected by the general easing of difficulty in games since the NES days, when players could be expected to wander for endless hours while waiting for hints by post from the Nintendo fan club. In *The Legend Of Zelda: The Minish Cap*, signs indicate which path leads to the next area, while the Bafflewood in *Paper Mario: Sticker Star* is made solvable by affixing stickers to signposts at exits, winnowing down false paths by a process of elimination. And these aids have come alongside a technological transformation that makes all Lost Woods almost pointless. Since there is no manual dexterity involved in getting through them, they rely on our spirit of exploration and perseverance. Now, we simply look up the correct route online – the sense of reward and relief upon finally emerging from a Lost Wood without knowing how you did it is lost to us. Still, the concept retains a vestige of wonderment for anyone who has ever found themselves in a forest so old and vast that it seems enchanted, designed to awe and confound. ■





POKÉ BALLS

Prison or penthouse? The cruelty/kindness of Pokémon's mysterious spheres

There are different schools of thought about what happens inside a Poké Ball, but if *Super Smash Bros Brawl* is to be believed they "contain a wide, comfortable, Pokémon-friendly world"

From *Pokémon* series
Developer Game Freak
Origin Japan
First release 1996

The old concern is that *Pokémon*, the cutesy kids game that has become nothing short of a global phenomenon, has a dark heart. Yes, its bevy of monsters have doe eyes and quivering smiles, but strip away the cartoon aesthetic and the fact remains that your character is charged with wounding animals until they are sufficiently weakened to be captured in a tiny ball. Then, having trapped the critter, you send them out to fight other pocket monsters in what must be the world's most socially acceptable contemporary take on cockfighting (*Pokémon X/Y* sold four million units in just two days). In this way, Game Freak is teaching postmodern generations how to hunt, trap and battle in a world where the children affluent enough to own a handheld device have little apparent need for such skills.

It's a selective take on *Pokémon*'s seemingly inexhaustible appeal and yet there's something to it. Sure, apologists will argue that captured Pokémon fight for you willingly, and that a complicated bond of trust and cooperation is formed through the trainer/monster relationship. But you could read this another way: as a digital introduction to Stockholm Syndrome. After all, no matter how big or small they are – and even the original Pokémon range in height from a mere 30cm (Pidgey) to 8.8m (Onix) and in weight from less than a pound (Ghastly) to nearly a ton (Snorlax) – each monster is kept in a one-size-fits-all cage: a tiny Poké Ball.

Pikachu may be *Pokémon*'s headline monster, but it's the Poké Ball, a red-and-white sphere about the size of a baseball, which unclasps in the middle and sucks Pokémon into its TARDIS-like interior, that is the visual shorthand for the series. The in-game origins of the Poké Ball are linked to the Johto region, where Apricorns grow. The fruit was hollowed out and then used to catch Pokémon. These antiquated designs (still used in the game by some trainers) were modernised by the still-mysterious Silph Corporation, a company based in the Kanto region, which manufactures and markets essential tools for Pokémon trainers. But outside of the fiction, the Poké Ball has its origin in the simpler tools of childhood bug-catching.

As a child, *Pokémon*'s inventor Satoshi Tajiri (who lends his first name to the lead character we know as Ash in the Japanese versions of the game) was infatuated with collecting insects. In the summer holidays, he would head out from his family home on the outskirts of Tokyo to search the surrounding undergrowth in search of beetles and other insects, carefully studying each one he caught before cataloguing it in a notepad bought for him by his parents. Clearly, Tajiri wouldn't go so far as to name, train and battle his captured beasts – even if a few did eat each other – but in whatever Perspex prison was used to house the creatures, the Poké Ball was born.



Three Poké Balls greet any adventurer at the outset of their journey, each containing a servile monster to start your collection

Outside of the fiction, the Poké Ball has its origin in the simpler tools of childhood bug-catching

In the games, a trainer may carry up to six Pokémon with them at any one time, and a conscientious adventurer will ensure their bag is filled with spares, ready to capture any new beasts encountered in the undergrowth. The role of the Poké Ball is manifold. There is the practical: the devices keep Pokémon separate, so they won't fight in captivity. They are also sufficiently small that they can be carried with ease. There is the aesthetic: the wonderful visual drama that accompanies hurling a Ball at an enemy and watching as a tame beast springs forth onto the battlefield. And finally, there is the psychological, a feature of the Poké Ball that appeals to the young player's deep fears: here is a manageable trap in which life's great monsters can be contained. In the Poké Ball, even the mightiest beast can be confined, mastered and, most comfortingly, carried about in a back pocket.

Not that all of the Pokémon come easily or willingly, and perhaps that unwillingness is crucial for giving the player a sense that they have tamed the untameable. After all, where is the glory in capturing a compliant monster? Stronger beasts will resist capture easily, bursting from the Poké Ball before it is able to clasp shut. For this reason, and the commercial reason of offering consumers a range of products of varying cost and efficiency, there is a series of Poké Balls to buy in the game, each with a USP. There's the Ultra Ball, which doubles your chances of capturing a Pokémon; the Luxury Ball, which increases the chance that Pokémon you capture will like you; the Net Ball, which increases your chances against Bug- or Water-type creatures; and the Master Ball, which guarantees it will snare any Pokémon it's thrown towards.

The Poké Ball is, according to one character, designed to be attractive to Pokémon: weakened creatures instinctively curl up in an attempt to heal themselves, an action that the Poké Ball's shape encourages. But quite what these captive Pokémon experience inside the Ball, or what happens when a trainer presses the button on the clasp in order to shrink its size between that of a baseball and that of a ping-pong ball for ease of carrying, is unknown. Whatever the experience, it appears as though Pokémon come to view their new houses with some affection. Several Pokémon have the ability to leave their Poké Ball at will, and yet the series shows that all of them return. It's this narrative note that reveals Tajiri's true hope with his invention: that Pokémon come to view their capturers as custodians and these spheres as their homes. After all, for Tajiri, *Pokémon* was always a game about collecting and caring for insects. ■

STUDIO PROFILE

Amanita Design

How robots, insects and gnomes are helping a Czech indie reanimate the point-and-click adventure

1 The original *Samorost* was Jakub Dvorský's diploma project. It's the story of a gnome trying to avert a spaceship collision.
2 *Samorost2* was Amanita Design's first game project.
3 *Machinarium*'s characters communicate via pictorial thought bubbles, not words.
4 Developed by Amanita for the BBC, *Questionaut* was designed to teach kids English, maths and science.
5 In *Botanicula*, five insects must work together to solve puzzles and save their home

Restriction breeds creativity, perhaps more so in games than any other medium. Take *Silent Hill*'s signature fog, implemented to mask the game's terrible draw distance; *Rayman*'s spectral limbs and associated powers, which he owes to the rendering capabilities of mid-'90s consoles; or the atmospherically clunky controls and static viewpoints of the early *Resident Evil*s – all examples of how technological constraints can lead to better games.

Over the course of the outgoing generation, hardware restrictions diminished as a factor affecting PC and console games. Now the barrier developers face tends to be cost: making triple-A titles is prohibitively expensive for all but a handful of publishers, and games that flop tend to do so spectacularly. The upshot of having so little room at the top is a thriving indie scene, which fosters tiny studios such as the Czech Republic's Amanita Design. A team of just nine people, Amanita works to its own schedule to produce ponderous, challenging adventure games in the now-unfashionable point-and-click genre. And yet these are games that can appear alongside big publishers's efforts at award ceremonies and take home prizes, even without complex animation, 3D models or English-speaking protagonists.

The studio was founded in 2003 as a one-man project by its current head **Jakub Dvorský**, who started making games as a hobby with his classmates in grammar school. At the point when he created Amanita Design, however, Dvorský had just graduated from the Academy Of Arts, Architecture And Design in Prague, where he had been studying animation. His diploma project – a short point-and-click game called *Samorost* – was the first videogame ever entered as coursework at the Academy Of Arts. After graduating, Dvorský began Amanita Design's expansion into a proper studio, making Flash animations and music videos. Shortly after, work commenced on a sequel to his thesis project, the Webby-winning *Samorost2*.

"I was working alone until I started preparing *Samorost2*," says Dvorský. "Then I decided to ask my friend, Václav Blín, to help me with the new game. I knew Václav from the Academy, where he studied [in] the same animation department as I did. He was known as the most talented animator around.

"I also needed original music. I knew of [electronic music composer] Floex's great album Pocustone, so I contacted him and asked him if he would be interested. Luckily, he was."



Founded by Dvorský (far left) as a one-man animation studio, Amanita Design has since expanded to become a team of nine

As time passed and Amanita Design grew, Dvorský began handing away portions of the creative work to other specialists, many of whom turned out to be as much a fan of his work as he was of theirs. "I used to create all the graphics in the previous projects, but it was obvious I would need help for a bigger project like *Machinarium*," he explains. "So we started working with well-known painter Adolf Lachman, who liked the game because his art style is very similar. We hired programmer David 'Oldes' Oliva, a freelancer who started helping us for free just because he liked our previous projects. And lastly, we decided to hire another animator to create the animations for the comic bubbles we use for communication and dreams in the game. We wanted a bit of a different animation style, and after a few mistakes we finally found [eventual *Botanicula* creator] **Jaromír Plachý**, whose minimalistic style and humour was a perfect fit."

"We love calm, imaginative, surreal worlds. Worlds into which you can sink and enjoy being there"

Jump ahead to the present day and the studio has over a dozen awards to its name. *Machinarium*, its point-and-click story of robot romance, is responsible for most of them, netting IGF 2009's Excellence In Visual Art Award, Best Indie Game Of 2009 awards from both VGChartz and Gamasutra, and a PC Gamer gong for Best Soundtrack.

Machinarium also marked the point at which Amanita branched out from its PC roots, bringing its brain-teasing puzzles and hand-painted art style to players on PS3, Vita, Linux, Mac, iOS and Android as well. Only XBLA missed out on it, thanks to Microsoft's rule that the games it sells through its store must be tied to a publisher. That proved to be more creative control than Dvorský and his team were willing to give up.



Amanita Design

Founded 2003
Employees 9
Key staff Jakub Dvorský (founder), Jaromír Plachý (director/animator)
URL www.amanita-design.net
Selected softography *Samorost*, *Samorost2*, *Machinarium*, *Botanicula*, *Questionaut*
Current projects *Samorost3*

But what is it that makes an Amanita Design game? What is it about the team's vision that's so worth protecting from outside influences? "We love calm, imaginative, surreal worlds," says Dvorský. "Worlds into which you can sink and enjoy the atmosphere, enjoy simply being there."

'Enjoy' might be the wrong word to describe the feeling of inhabiting *Machinarium*'s bleak and tumbledown world, a rusted city encircled by a scrap heap and patrolled by dystopian robot guards. If setting were all there was to the game, it would make for a ho-hum apocalyptic adventure – oppressive, dark and heartless. But under the coating of rust and grime, *Machinarium* is a playful game, childlike even. A puzzle might call for you to distract a guard and pour ball bearings into his path so he skids and lands on his back, or to forge your own policebot's helmet by dipping a traffic cone in blue paint. It's the logic of children's fairytales, of Winnie The Pooh adopting the guise of a cloud and using balloons to steal honey from the bees.

"We try to create something diverse, with original puzzles, interactive toys and other things to surprise or amuse players," says Dvorský. He gives the example of a *Machinarium* encounter with a robot called the Ventilator. Protagonist automaton Josef has to enter a vent on a roof, but the only way in is through a spinning fan blade controlled by the moody machine. The robot asks Josef a series of questions, with each correct answer slowing the blades but never stopping them. Only by deliberately answering incorrectly can the player enrage the Ventilator to the point where the fan breaks altogether, allowing Josef safe passage. The sequence encapsulates that point-and-click game loop of intrigue, frustration and elation when the solution becomes apparent, but at the same time plays with your expectations to deliver a moment that Dvorský tells us he hopes is "at least a little surprising and funny".

Dvorský admits that such moments don't always work in the games he has made so far,





Machinarium (left) and Botanicula may look and sound very different – the former bleak and dystopian, the latter a warm celebration of nature – but both are games about exploration and lateral thinking, building memorable casts of characters without the use of dialogue

but he thinks of each project as a learning process. "In *Samorost* and [*Samorost*]*2*, the puzzles were chaotic, surreal and often didn't make sense," he says. "In *Machinarium*, some of them were a bit too difficult and boring."

This isn't the sound of false modesty: *Machinarium* does contain puzzles that are convoluted to the point of being frustrating, and moments where a particularly impenetrable section devolves into clicking madly around the screen, trying to force an inventory item to interact with every character and piece of background art. Where the game can stumble is in finding the balance between aiming to offer more than simple, mainstream box-and-switch puzzles and creating complex interactions that still hold together logically.

But his acknowledgement of the game's failings is not to say that Dvorský is going to start pandering to his critics or mainstream pressures. He's certainly not abandoning the point-and-click genre just yet. "We make games we love to play, no matter if that style or genre is currently trendy or not," he says. "We follow our own instincts and don't care too much about what people say about our stuff. The biggest achievement is when people say that we managed to move forward and have made something better than last time."

"We follow our own instincts and don't care too much about what people say about our stuff"

Every game that Amanita makes begins with the design of the world – how it looks, how the elements within it interact to form something believable, and so on. Usually, Dvorský will have had the ideas for a new game in his head for months before production starts, but only once the setting has been nailed down does the team start really thinking about the stories, the characters and the puzzles in detail.

"The art style is very important to us. We spend a huge amount of time and energy finding the right style. With *Samorost3* [currently in development], it took us about three months to make the first background we really liked."

The emphasis on style over storytelling may appear odd at first, but Amanita's games traditionally eschew dialogue and let their stories bleed through their environments. For example, *Botanicula* – the studio's most recent release and a recipient of further awards, including Excellence In Audio at IGF 2012 and a nomination for Best Story/World Design from IndieCade – is set inside a tree. Tiny creatures pulse through the capillaries of stems, insectoid life teems on the branches, and spores and motes float through the air. So when you discover this whole ecosystem is under threat by a mysterious corrupting influence, it hits home with more force than a bog-standard 'save the world' storyline.

It also showcases Amanita's penchant for making interactive worlds in the most literal sense. As your group of five woodland heroes explore, other residents buzz about their daily routines. Clicking on a resting fly might cause it to buzz to a different branch – a tiny, inconsequential detail in a sea of equally miniscule interactions. What such attention to detail does, however, is invite you to play with the game world by offering a powerful sense of discovery. *Botanicula* makes you feel like a child lifting up a rock to see the woodlice scurry away.

It would be easy to see Amanita as a vehicle for Dvorský's ideas alone, but that simply isn't the case. When Dvorský gives over control of a project, he gives it over completely. In his own words: "The lead director has the final word on everything and his responsibility is to first design the game and then oversee all the aspects so the overall style is true to his vision."

In the case of *Botanicula*, that vision belonged to Plachý. "Jakub gave me the opportunity to create a game based on my own ideas, which was a great offer," Plachý explains. "I lay down under the tree in my garden and started thinking about it. That was the moment that *Botanicula* popped into my mind."

Botanicula started as a solo project, with Plachý filling the roles of director, writer and graphic designer. After a year and a half, and with backing from Dvorský, Plachý decided to bring in extra help. He hired a programmer to assist him with the gameplay, and Czech band DVA to write the backing music and voice *Botanicula*'s menagerie of forest creatures.

Without spoken dialogue, the backing music and chirruping of the characters are all the more important. The combination of painted scenery and animal sound effects voiced by people are surreal hallmarks and all part of the game's charm. "I think that all Amanita games are connected through this approach – funny animations, bizarre characters and so on," says Plachý.

With two award-winning hits to build on, the future for Amanita is more: more projects being made at once, more staff and more refinement. Of the games currently in development at the studio, the only one Dvorský will tell us about is *Samorost3*, the continuation of the adventures of a little space gnome and his tiny dog. "It's definitely bigger and much more elaborate than *Machinarium*, and everything is more polished," Dvorský tells us. "The success of *Machinarium* gave us a lot more freedom and the chance to collaborate with new, talented people. We've got more time and money to make the game we want without any compromises."

More than anything else, it's a lack of compromise that defines Amanita's games. Beholden neither to a publisher nor its public, its small team has restrictions to work within, but the freedom to make what it likes. And after his early successes, Dvorský can afford to enjoy the mystery surrounding *Samorost3* and at least one as-yet-unannounced project. "We'll still make point-and-click or puzzle-based games, but we hope to take the genre somewhere new," he teases. "I'd love to try something experimental – maybe to play with linearity and nonlinearity and story. There's a lot to explore and new approaches to try." ■



Jaromír Plachý
Lead designer, *Botanicula*

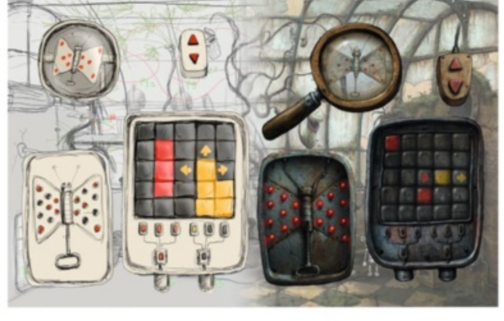
Dvorský's Academy Of Arts classmate and creator of *Machinarium*'s thought-bubble communications is also the mastermind behind Amanita's second big success, *Botanicula*, for which he had to balance the roles of writer, designer and director simultaneously. He talks to us about the game's critical success, finding inspiration among nature's lower orders, and why Amanita's worlds are not as bleak as they may appear.

How did you get started working with Amanita, and what were you doing before?
I studied animation at university and created several short animated movies, comic strips and graphics for the web. At that time, Amanita was looking for an assistant animator – that's how our cooperation began.

Compare *Botanicula* to *Machinarium* and *Samorost2* and the latter games both feel lonely: you're just one character alone in a bleak world. Why did you decide to have five lead characters instead of one for *Botanicula*, and how they were created?
Personally, I don't think that the worlds in previous Amanita games were that bleak. In *Samorost*, the dwarf has a dog friend; in *Machinarium*, there is a real relationship between two robots; and then in *Botanicula*, there are five very close friends at once. Those five heroes of *Botanicula* were the ones I created in my first background and character sketches. They seemed funny to me, and I thought, 'Five main heroes are more interesting than one.' This impulsive decision had a lot of drawbacks, of course – endless animating, for one. But now we've finally made [it], I can say again: five heroes are better than one!

The game feels like a celebration of nature – all the animals have their own movements and ecosystems, and the spiders are frightening because they threaten that. Is there a message in the game that you were trying to convey?
Nothing intentional. The game was created based on my opinion that nature is lovely! That it can provoke fantasy and that it's fun, when we look at it from the right angle. There are a lot of documentaries about lions and whales – only rarely do you see one about how a mushroom grows in the woods. You could say that I wanted to pay off the debt to this 'common' part of nature.

How important to you are the awards the game has won since its release? Do you care about that sort of feedback, or is it more about satisfying your creative vision?
Firstly, *Botanicula* was developed in the way it was developed because I enjoyed doing it that way. And, of course, when the finished game is appreciated by people, critics, wins awards and has fans, it's great! After all, you don't make a game just for yourself. And even if I were upset over some negative feedback, that feedback helps me to improve my thinking about my future work.





Early character and puzzle designs for *Machinarium* (above). These sketches are then transferred onto pencilled backgrounds to map out the game's stages



THE MAKING OF…

Frozen Synapse

How the cold reception to its first game galvanised the brain trust at Mode 7 and helped it take a tactical risk

Frozen Synapse's iOS and Android versions support crossplay, and you can use the same account on PC and tablet. Its designer feels having multiple platforms also makes Mode 7 more robust

Format PC, Mac, iOS
Publisher Mode 7
Developer In-house
Origin UK
Debut 2011

Helmuth Von Moltke the Elder may sound like a *Skyrim* NPC, but he's the greatest military strategist you've never heard of. Named Chief of the Prussian General Staff in 1857, General Von Moltke orchestrated campaigns against Denmark, Austria and France, and developed a theory of combat that secured him a place in the military history books.

For this soldier, strategy was something that generals thrashed out before a conflict began, a plan for all conceivable outcomes. But once hostilities started, tactics became the focus. He even coined the phrase, "No plan survives contact with the enemy," albeit in a far less pithy form.

Players of *Frozen Synapse* will identify with the sentiment. The game offers you command over a squad of neon soldiers as they contest a cyberpunk battlefield in five-second bursts, and its simultaneously enacted phases often deliver a cruel reminder of the vagaries of fate. You plan, you prepare and you formulate your killer strategy, previewing your soldiers' moves and simulating your enemies' actions. Then you let your orders come in effect and watch as things go awry. Some call it phase-based play, others use the term simultaneously executed strategy. We prefer the former, since in *Frozen Synapse* any strategy tends to collapse like a house of cards until all that remains is the cold, pragmatic reality of tactics.

"Me and Paul often talk about the distinction between strategy and tactics," says *Frozen Synapse* programmer and designer **Ian Hardingham**, who co-founded Mode 7 with joint MD Paul Taylor. "I tend to think of strategy as an overarching scheme. In games, you choose what units you're going to have; it's the setup of the more meta-situation. Whereas tactics is what you're doing in *Frozen Synapse*: the minutiae of going left or right."

If strategy is global, tactics tend to be more adaptable to the realities of the situation on the ground. It's a distinction the Oxford-based indie has come to appreciate since its birth in 2004. Over almost ten years, and two games, its team has learned that an overarching strategy doesn't always pan out when it meets the real world.

Back in the summer of 2004, Hardingham had just finished a BSc in Mathematics and Computer Science at Oriel College, Oxford University. As a reward, he went to Normandy with a pal to spend a fortnight in the luxurious holiday home of his friend's "very, very rich" grandparents. "We spent two weeks drinking, watching late-night poker and playing *Laser Squad Nemesis*," he remembers, "but we were actually there to write a script for my first game."

The project being stalled by booze, cards and Julian Gollop's *X-COM* follow-up was *Determinance*, a thirdperson sword-fighting project on which Hardingham was pinning his post-university career prospects. "Back then, I kind of saw indie gaming as a possibility," he remembers. "I'd seen a couple of games have a little bit of success, and I thought online distribution was going to change everything. I reckoned that me and a few friends could probably make something that could be a big success."

That fortnight gave shape to Mode 7's first game, but it also marked the conception of the company's second title. In those sessions of *Laser Squad Nemesis*, Hardingham started to pick apart his love/hate relationship with the game. "*Laser Squad Nemesis* is a really disruptive, unusual and interesting game, but it's also so longwinded. You've got to do this boring setup base at the beginning, and it's so easy to make mistakes," he explains.

Although he was frustrated by the time it took to get to the meat of the action, Hardingham loved the approach of simultaneously played-out phases. "I found it really evocative as an idea. Both players are planning and then you both go and see what happens."

> "Everyone thought we were crazy. People would say, 'There is no market for that; it's dead in the water'"

What really appealed to him, though, was the scope for faking and bluffing. While traditional turn-based strategy games don't leave much room for mind games, this kind of design offered a greater opportunity to psyche your enemy out. "I was much more interested in that than winning by force. What I want in a competitive game is the opportunity to really trick you."

Back in the UK, Hardingham and a bunch of university friends worked on *Determinance* for the next three and a half years. With its analogue, mouse-controlled sword fighting, it offered something totally different. Looking around at the embryonic indie scene and the growth of Steam, Mode 7's co-founder was convinced he had a watertight strategy for breaking into the industry.

He was wrong. *Determinance* was ready in 2007, but sank without trace after being denied a Steam release. "It was a massive disappointment," says Hardingham, who learned of the rejection on a trip to the Lake District with his now-wife. "We knew Steam was the place to be. And, of course, it's not just about not getting on Steam, it's kind of an understanding that people aren't that excited about the game. They aren't as excited as you are about it." The trip went from bad to worse. "The mattress that we had in the hotel was absolutely terrible. And I really don't like the Lake District, so the whole thing was really a disaster!"

But some good came of the rejection: the game's creators resolved to keep trying and officially founded Mode 7. "We put a stake in the ground after that," Hardingham says of the moment he and Paul Taylor, who handled the music for *Determinance*, set up the studio properly.

Over the next few years, Mode 7 kept itself afloat by doing contract work. Clients included Novint, creator of 3D joystick curiosity The Falcon, and a selection of TV companies (Hardingham's software powers the scoreboards on gameshows such as The Weakest Link and Deal Or No Deal). Meanwhile, the two partners rethought their strategy for getting into the industry.

Remembering his *Laser* *Squad Nemesis* matches in Normandy, Hardingham returned to the thought of phase-based gaming. Originally called *Psych Off* – a title he's still sad was axed – the project was initially planned for Nintendo DS before the focus shifted to PC. Right from the start, though, it tapped into what the designer loved about *Laser Squad Nemesis*: the opportunity for bluffing and faking out your opponent.

Phase-based games were such a niche, underexposed genre that there was scope for Mode 7 to either make it its own mark or fail horrendously. "Everyone thought we were crazy. People would say, 'There is no market for that; it's dead in the water.' For me, though, the most important aspect of making an indie game is that you have to do something that hasn't been done before. You're not going to be able to compete in terms of graphics, so make sure that there is one thing about your game that is obviously different."

Frozen Synapse's development cycle began where most end: multiplayer. Unlike *Determinance*, which started with a script penned in Normandy, Mode 7's second project put gameplay first. "I'm a massive believer that the game needs to be fun and completely prototyped before you even begin work on a single art asset," Hardingham says. "Just what you need to play the game."

Original prototypes for *Frozen Synapse* were dubbed *Wonky Triangle Wars* in honour of their placeholder programmer art. Together with level designer Robin Cox, Hardingham implemented

ideas and playtested them over and over until he was sure he had a viable core mechanic. As a result, plans for a digital overlay on realistic rooms quickly gave way to the stark, neon-tinged aesthetic that would come to define the game.

The decision was a tactical masterstroke. Since the team was working with limited resources while balancing external for-hire work, trimming extraneous fat from the development cycle was a necessity. It freed Mode 7 to focus on *Frozen Synapse*'s gameplay: a series of carefully planned phases that played out in short bursts, with a preview mechanic that allowed players to test their moves before locking them down.

***Frozen Synapse* looks** nothing like *Counter-Strike* but both are games that require their players to remain tactically supple. Adapting to the ebb and flow of conflict is crucial to victory. *Frozen Synapse* captures that so perfectly it's been dubbed "chess with guns".

"I am too humble to have come up with that myself," says Hardingham when quizzed about the phrase. "But I am always really flattered when people say that. I get very frustrated with how much games are about aesthetics and how little they are about mechanics. For a competitive game, I really want to see the naked mechanics."

Frozen Synapse's brazenly underdressed mechanics made programming the singleplayer AI a challenge. As a result, the campaign mode, which features a moody story written by Taylor, was put on ice until late in development. "When I design a game, me and Robin just play and play and play. If I need to impose a new rule, I just tell Robin, 'OK, this time we're not allowed to do this.' But if I was playing singleplayer, I'd have to program the AI to do that."

But *Frozen Synapse*'s design made creating any form of AI challenging, because there was no room for it to have an unfair advantage. "Like poker or chess or bridge, it is a very naked game design. Because we have randomly generated levels, there's no scripting; [the AI] has to play as a human would play and go through similar kinds of processes, and that's kind of hard to program."

In response, he turned to bridge simulations for help. "With this kind of game, if you try to make an AI that doesn't act like a human, it just doesn't end up playing well or interestingly. You have to think, 'How am I playing this game?' and then try to emulate it. That's quite a lot like how bridge AI works. Bridge AIs try to guess what hand you've got, and will guess hundreds and thousands of hands you might have, and then work out what the best play would be."

Frozen Synapse's AI works in much the same way. It's split into two modules: one that comes up with what a human opponent might do, and one that works out how to beat those moves. The top-level idea was to have the AI come up with 10 or 100 different plans its opponent might have, flipping back and forth between its own side and yours to examine the possibilities, and then finding the best way to beat them. "It was literally saying, 'What do I do if he does nothing? What would he do if I did that? What would I do if he did that?' It eventually forms a really nice solid plan."

Frozen Synapse's launch had to be solidly planned, too, but so effective was Mode 7's approach that it transformed the company. Right from the start, it was obvious that its new game had an allure that even surprised Mode 7. At Nottingham GameCity in 2009, early demos were set up in a huge boxing ring in the main tent. Despite the complexity of the UI, the simplicity of the game meant people got it. "People who weren't really into games were sitting down and playing for an hour, hour-and-a-half. We were completely stunned by that; it was something that we weren't expecting at all. That was the first idea [we had that] it was good. Then we started getting some trusted closed beta testers playing the game. Because I'd had this failure with *Determinance*, I know what it looks like when someone isn't really liking your game. But it couldn't have been a more night-and-day difference."

The paid beta was released in mid 2010. It brought in $135,000 and earned sustained media attention, enabling Mode 7 to give up contract work. Another sign that the tide of the battle was shifting in its favour arrived in the studio's inbox not long afterwards. Unprompted, Valve was convinced by the game's growing profile to invite Mode 7 to bring it to Steam.

Meanwhile, an early and aggressive pursuit of a Humble Bundle deal gave Mode 7 the chance to reach a much bigger audience, plus the promotion made over $1 million. "When we went to PAX in 2011, maybe one in four people had heard of our game," says Hardingham. "Now, if we go to a show, it's really rare for someone not to have heard of *Frozen Synapse*."

With its revenue streams expanded, Mode 7's thinking could afford to become much more global. "In terms of money, we've invested most of it in terms of longterm savings for the company, so we know that even if we fail with our next game, maybe even with the game after that, we can keep on going and keep on paying everyone's salaries," Hardingham says. "We've got to understand that there's this crazy indie bubble right now and no one knows where it's going and it's very easy to have a failure. We have to make sure that we don't put all our eggs in one basket."

Plans to broaden Mode 7's reach saw the release of an iPad edition of *Frozen Synapse* in May 2013 (a Vita port is being made externally). "It has transformed us from a one-platform to a two-platform company, which means we're no longer as reliant on Steam for future viability."

For Hardingham, the cautious approach to business harks back to *Determinance*. "It's the memory of that failure and the belief that we mustn't go through that again."

Mode 7's third game, *Frozen Endzone*, is in development for a 2014 release, but it's obvious that the company's cautious tendencies don't extend to its design. "It's been scary again, honestly. The same people who told us we were crazy with *Frozen Synapse* are telling us we're crazy with *Frozen Endzone* as well. Let's hope they're wrong a second time!" ■



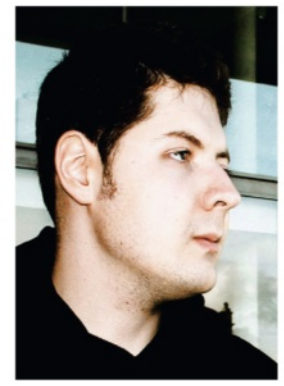
Ian Hardingham
Designer, Mode 7

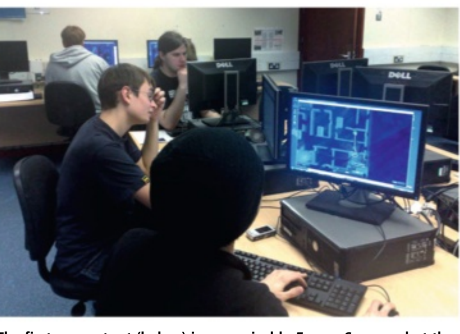
Why do you use the Torque engine?
At university, I was a massive *Tribes 2* fan. For my third-year project, I created a sportscaster camera that took an observer in a match, cast it and tried to find the coolest angle to see it from. I managed to shove this into my maths degree by saying that I had to use clustering algorithms to work out what were the events within a *Tribes 2* match at any given time. When I started making games, I found that the people who made *Tribes 2* had bought out the rights to the engine and were selling it as the Torque engine.

How are duties split at Mode 7?
One of our big things is it's my job to make the design and the gameplay. It's Paul's job to do x, y and z, and he gets to have the exclusive veto on everything [he does]…

You've talked about "triple-I gaming" – what do you mean by that?
We were at a dinner thrown by Valve in London earlier this year. When we mentioned it, the table, which was full of other prominent indies, groaned massively. But we think increased competition in the indie sphere means the production values are going to skyrocket. Just finishing a game puts you ahead of 99 per cent of other people. Really polishing it puts you ahead of a whole bunch.





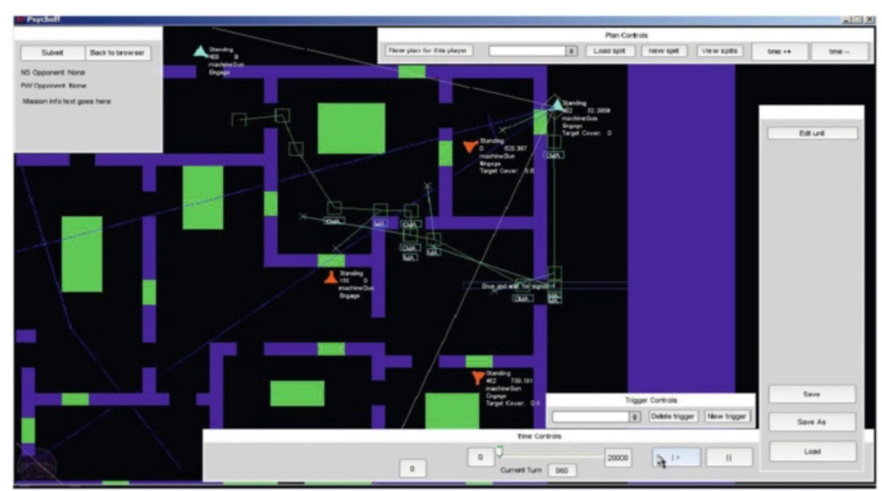


The first concept art (below) is recognisably *Frozen Synapse*, but the design was tweaked for immediacy. Paul Taylor (left) wrote the story, and Reading students (above) helped Mode 7 by being beta testers



Future sports

At first glance, *Frozen Endzone* looks like a futuristic take on American football. Glowing robots charge across a randomly generated pitch, chasing or protecting an obsidian ball that could have been ripped right out of Tron. You map out the moves and passes your team makes, hoping to snatch the ball and slip it past all the greebling on pitch and into a neon-hued endzone. "It's quite a difficult game to describe, but it certainly isn't an American football game," Hardingham clarifies. "None of the rules of football are in there. Its core mechanics are turn-based: who's going to block who, or who's going to be able to get where. People shouldn't be worried that it's based on a sport that they haven't heard of. It's designed to require a little bit less concentration than *Frozen Synapse*, but also be even deeper and more creative in that you can really decide how you're going to play the game, and it's still as meaningful as the tactics in *Frozen Synapse*."



Early prototypes were visually basic, but had many elements of the final game, including mid-height cover and movement nodes

What Games Are



TADHG KELLY

What the tabletop teaches

When I was but a lad, my true love was tabletop roleplaying games. Although I was into computer games, TRPGs were the ones that really opened the door in my mind marked 'Imagination' and left it open. Whole universes came to life in my head, and it was TRPGs that made me want to be a game designer.

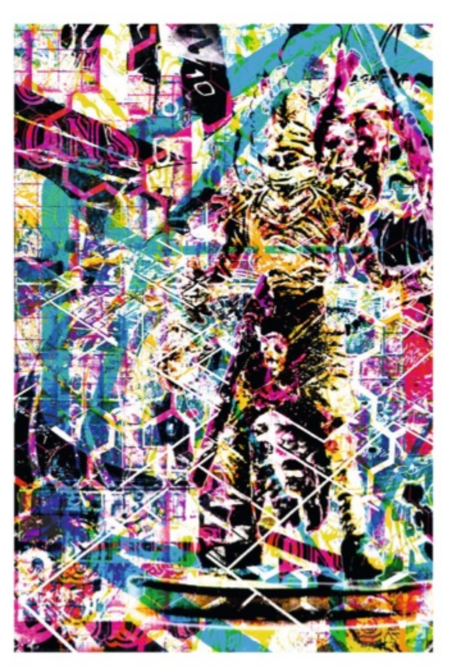
Fifteen-year-old me spent a lot of time rolling dice and drawing maps. He liked to play with possibilities, to invent and make games. Like many bright kids, he became adept at cramming in order to get past school exams, but spent the rest of his time daydreaming. He even got into trouble when, upon finishing an English exam with time to spare, his teacher caught him writing character sheet notes on the back of his test paper.

Forty-year-old me looks back on those years with fondness, and also an enormous sense of fortune. Although I later separated from tabletop gaming, I owe it a phenomenal debt. Why? Well, because making TRPGs and other kinds of 'trad' games taught me why designing games involves more than a healthy imagination.

Because they are played in the mind, TRPGs are most often associated with storytelling. Most of the narrativist school of videogame design essentially recycles thinking that emerged in the late '80s in TRPGs. You'd think that this would make me an experience-led designer. Not so.

TRPGs taught me to see games as interlocking worlds of entities and rules. I learned to look for key patterns in the fictions I saw in my head and figure out ways to make them playable. I still do. I also hate wasting time. Making videogames involves a lot of waste, but what's often not talked about is how much comes from poorly formed design. The designer is the architect of the game, the one who figures out the shape of what the team is to make, so the quality of her output exponentially affects the chances for success.

What most people see when I design is documents and diagrams. I may use a number of tools to help me get to that place (loop diagrams, dynamic maps and other obscure things), but my output is sketched-out interfaces, flows, specs and resource tables. That can be a lot of material, but that doesn't mean it's useful.



Making games involves a lot of waste, but what's not talked about is how much comes from poorly formed design

Great games are very efficient, often in multiple ways at the same time. Efficient game designs enable near-infinite outcomes from highly finite building blocks. Done right, you can hang an entire universe off a simple system. Done wrong, you're simply writing a bad backstory. Put another way, great game design is algorithmic. But algorithmic design thinking is not about code; it's about creating systems that players will easily grasp and yet also find widely applicable. The engineering may prove easy or fearsomely complicated in its own right, but that doesn't matter from a design perspective.

In videogames, unlike TRPGs, there is no capacity to fudge it if the system doesn't work and the range of actions is considerably smaller. In a TRPG, your player may say he swims, climbs, teleports or whatever. In a videogame, each of those actions requires development. Even in highly emergent videogames, there is a software limit.

Designing for efficiency is difficult. When done well, you save untold hours for the rest of the team. Actually doing it, on the other hand, is time consuming for you. It's also hard.

Another lesson that TRPGs teach is the benefit of seeing players up close and personal. You see what matters to them, and where their stated and actual preferences diverge. You learn that your friend who says she's all about playing for character is really all about playing for loot.

This is an experience that most videogame makers never get to have. You might watch a partner play your game, watch a focus group or some other contrived event, but those sources of connection are neither long nor natural enough for real behaviours to emerge. Similarly, metrics may give you significant data, yet usually there's a gap in perception. You don't get to see the looks on players' faces or hear their sighs of boredom.

A word of warning, though: the one lesson that any budding videogame designer needs to unlearn (as I had to) is the mistake of writing a videogame design as you would a TRPG manual. Designers who come from TRPGs often write as though the development team is a roleplayer.

A TRPG is written as a manual for players and game masters to create collective games for themselves. They need to know the backstory and the fiction, but also the rules. They need to know the numbers and attributes of things, the dice to roll, the maps to use. A development team, on the other hand, doesn't. Your team is not a gang of customers being invited to play a game. They are creative professionals. Your job is to describe the frame of the thing they will build. And the gap between the two is one that many have not yet crossed. Call it a personal obsession, but I believe we can cross it with the right tools and in time, even if we're not there yet. In the meantime, pick up a copy of Pathfinder or Numenera or any other TRPG and run a game. You'll be amazed what you learn.

Tadhg Kelly has worked in games, from tabletop to consoles, for nearly 20 years. Visit him at www.whatgamesare.com

In The Click Of It



CLINT HOCKING

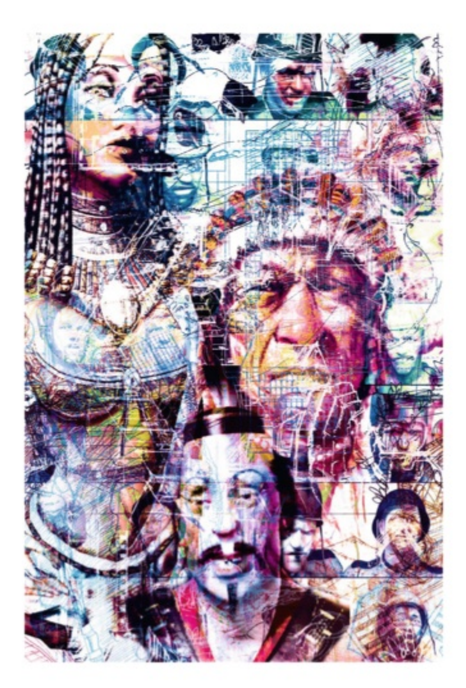
Literacy always wins

Recently, industry icon Warren Spector wrote a piece for GamesIndustry International about media effects. In it, he looked at the current state of the never-ending debate about whether games cause violent behaviour, and, more generally, whether games have measurable adverse effects on players. Over the course of decades, this debate has taken many forms. Countless games have been singled out as harmful. Whenever there's a mass shooting, you can count on the mainstream media to point to the perpetrator's interest in violent videogames as a potential cause. But study after study has shown that games do not cause violent behaviour.

Spector, however, was not writing in defence of games; he was making a deeper and more important point. He pointed to a couple of recent studies that demonstrate games can have positive effects on players. Yet Spector did not uphold these studies as evidence to undermine those who seek to hold games accountable for all of society's problems. He argued instead that while it is great that games have been shown to have positive effects in terms of the way they can improve our cognitive capability, the fact that games have this capacity means developers have a responsibility to understand the complexities of the effects games can have on players.

I think this is a reasonable position, and I agree with Spector that we need more science and a better understanding of the effects of our medium (and of every other medium) with regard to how people's brains develop under different levels of exposure. At the same time, however, I think Spector misses most of the argument.

Just as the argument is not about whether *GTA* causes people to behave violently or to engage in criminal, asocial or antisocial behaviour, the argument is also not about whether games improve cognitive capability. Of course it is true that if games have the capacity to alter cognitive function, we need to better understand the mechanisms involved, so that we can be sure we aren't interfering with players' cognitive faculties in ways that are damaging. It's similar to saying we know people need sunlight to synthesise vitamin D, but we also know exposure to sunlight increases the risk of skin cancer. No sane person



Literacy in games, as with literacy in the myriad expressive forms that have come before, enriches us

would ever argue we need less scientific research into the effects of exposure to sunlight.

The argument for the development of games as a medium for human expression goes so far beyond the discussion of whether a given game can be harmful or beneficial to a given player that it is almost laughable. Absolutely games can be harmful. Literature, film, sculpture, painting, music: all of these forms can espouse positions that are sexist, racist, classist or nationalist, and demeaning, discriminatory or hateful in countless ways. Much of Shakespeare's work portrays women as second-class citizens compared to their male counterparts. Many Post-Impressionist paintings have been criticised for being pro-colonialist or even racist. Games, obviously, can do the same (and do). *GTA* is demeaning to women. *Splinter Cell* glorifies nationalism. *Civilization* perpetuates cultural stereotypes.

The point is not whether games are beneficial or harmful. Any given game could be either. The point is also not whether we have a responsibility as developers to respect the power of our medium and make games that do good rather than ill (of course we do). The nuance of the argument lies in whether the potential good in developing games as a medium of human expression outweighs the potential ill. The nuance of the argument lies in the question: 'Knowing what we know about the power games have to influence human cognition and behaviour, should we continue to refine our capabilities in their development?' Faced with this question, I think the answer can only be a resounding 'yes'. We might as well ask, 'Knowing what we know about the power of literature, should we continue to write?' The answer is always, and always shall be, 'yes', and not because of some vague claim to the right to freedom of expression, but because of the immeasurable value of new literacies.

The potential benefit or damage caused by an individual written work (even one like the Bible, which has arguably justified the murder of tens of millions) is insignificant next to the value of the literacy of the population in the form of the work. Literacy in games, as with literacy in the myriad expressive forms that have come before, enriches us. Games give us perspectives into the operation and behaviour of systems. Games afford creators new ways of describing the biases they perceive within systems. Games provide us with a new way of describing the world we experience and of experiencing the world as others perceive it. Games offer a new channel through which we can articulate perspectives and empathise with one another.

To me, this is the core of the debate about whether or not games are harmful. Games themselves can be beneficial or harmful, and we have a responsibility to endeavour to create the former. But regardless, making games is always a net positive.

Clint Hocking lives in Seattle and works at Valve Software. He blogs at www.clicknothing.com

Word Play



JAMES LEACH

It's good to talk

Life is, in essence, a series of quests. That's what I've decided. There are big, rare ones, such as moving house or getting married. There are also smaller, more common ones, such as renewing your car tax online or going to the pub with Geoff, not because you like him, but because you want to borrow his torque wrench.

All quests need an end result, a resolution which you, the quester, are aiming for. You may not reach it, but you want to, or else you wouldn't be bothering. And we do all bother. We all like our real-life quests – you, me, Kranthor The Warrior King in the flat below. We're all on some sort of a quest.

So life is like a roleplaying game, except that, unlike in games, we sort of try to do the right thing, at least most of the time. A while ago, the big deal was games that changed according to how you played them. *Fable* springs to mind. Your character sits on a spectrum of good and evil, and every quest and most of the actions you can take will slide you one way or t'other on that scale. But when faced with this sort of mechanism in games, people usually want to be as evil as possible and they always want to be as extreme as they can. A middle ground of being all right – sometimes a bit of a idiot and sometimes a smidge heroic – is what we mostly are in real life. It's boring. Games are where we can go to the edge. They are a space where we can cut people up with axes, drive them into walls or bomb them with pine cones from space (that last one isn't an existing game, but if I had my way, it would be). We're all programmed to test the boundaries in games of choice, because it's safe, fun and it might prove the best way to win.

One thing I like to do is question the way games tell us their stories, or get us to 'write' their stories. Often I do this in a deliberately high-pitched voice because it's more annoying that way, but I question it because change and innovation are good. However, I have long thought that quests, missions and levels in games are fine. Everybody understands them, they're a good way of tracking players' progress, and it makes life easier for the developers as well. So what if people want to try to be extreme? We just cater for it and they go away happy.



The other thing that's striking about Versu is the scale of it. It's sort of tiny. One of the quests is to cheer people up

So imagine my surprise to find myself drawn into a game that appears to reward harmless social niceness and unchallenging Victorian decorum. All accessed via an interface that appears to be a blood relative of the text-only adventures of the 1980s.

The game is a mobile app called *Versu*. Yes, you see text and static pictures, and you click on replies and actions when they are available. That's your lot. And yes, it starts off in a Victorian drawing room in which you are about to receive visitors. And yes, I found myself playing it, utterly engrossed, for ages.

Versu is an engine that calculates with surprising finesse the possible outcomes for either a series of events or statements within a conversation. Once the application is loaded, you can choose from a selection of downloadable episodes, all based on social interaction.

Although there are many things you can do, it's not about doing things so much as it's about talking to, learning about and even manipulating the NPCs in the game. In turn, they will speak to you and each other, and form their own opinions about you taken from what you've said and done.

Versu has the classic dendritic structure, whereby at each moment you are faced with choices and the ramifications of each of them will echo throughout the rest of the episode. Initially it seems rather retro and simple, but the complexity of the AI seems to be astonishing. For some reason, all thoughts of being extreme or evil don't rear their heads when I'm playing this. It's simply too well balanced, too clever and finely tuned. And yes, I know this isn't the place for a review, but here we have a glorified conversation generator that hides a sophisticated reactive engine and leads to dialogue more real than any I've seen before in a game (outside of static, pre-written scripts). I can't help wondering whether the potential for this lies with fitting it into something bigger and more traditionally game-like, or whether it can become a cult thanks to user-generated content. Because, in a scorching move, the developers of *Versu* have enabled anyone to create and share their own stories and adventures via the app.

The other thing that's striking about *Versu* is the scale of it. It's sort of tiny. One of the quests is to cheer people up. Another is to drink tea. Yet it remains a game – sorry, I suppose it's an immersive interactive drama – that could easily be about the conversations of two governments heading towards a nuclear war. Or about rival gangs in urban America. Or convincing Susanna Reid to ride on the back of your motorbike. The possibilities, not to mention clichés, are limitless.

In conclusion, then, when faced with complex characters being controlled by fearsome AI, one doesn't naturally recourse to being as evil as possible and trying to break things. And also, life really is a series of quests. Carry a sword.

James Leach is a BAFTA Award-winning freelance writer who works on games and for ad agencies, TV, radio and online



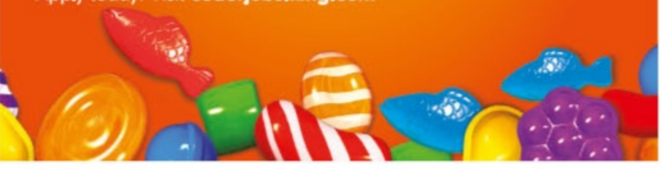
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